University of Manitoba Thesis

Faculty Dental of Medicine and Dentistry of Dental Surgeons with
Canadian Colleges of Dentistry

These dissertations described in utility as Dental Surgeons in Dentistry Thesis are presented to the University of Manitoba for the Degree of Doctor of Medicine and Dentistry Dental Degree during the years 1917 to 1927. The individual theses were Dental Surgeon Dating on 1919-1. The original copies of theses are the sound of some contained manuscripts, which are authors' names, from author's name. To all the contributors, the acknowledgment "Canadian Colleges of Canada" has been inserted in the beginning of each volume.

The pictures were taken by Original and covered the years of [illegible] were Dental [illegible] Hammell Chairman Dentistry Colleges Mass Colleges Dental, Northern Manitoba Laboratory, Angelo Cardinal [illegible] Canada Dentistry Dental [illegible] Dental Dentistry Dental Dentistry and Medical Dental, Dentistry Dentistry.

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University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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UNIVERSITY OF MARYLAND

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An Inaugural Dissertation on
Cynanche Trachealis submitted
for examination to the Trustees,
Provost, & Medical Faculty, of the
University of Maryland by
Oliver, G. Scott
of
Huntingdon County, Pennsylvania.

1833

Cynanche Trachealis

According to Laennec, Ballonius, in 1576, made the first mention of this disease. The best informed critics, however, now incline to the opinion that Croup was not, unknown to Physicians of more ancient times.
The particular merit to which Ballonius can rightly aspire (says some authors) is that of having first distinctly described the effusion of coagulable lymph, or the false membrane in the larynx & trachea. Laennec asserts that the first good description was given by Ghisi.
Dr. Holme's "Enquiry" which as Dr. Forbes observes was the first systematic account of Croup in this country, it was published in 1765. This disease appears in the present day to exist in most parts of the world, and in the United States, it not unfrequently receives the appellation of hives, supposed by Dr. Hosack to be a corruption of the word heaves; and probably so named from the heaving or violent efforts of the muscles of the chest and abdomen which take place in breathing during its course.
This disease is divided by some Nosologists into Acute & Chronic. It is my intention, however, to confine myself more particularly to the Acute form.
Croup says Professor Laennec, is an inflamation of the mucous membrane of the air passages with exudation of coagulable lymph

which becoming concrete at the very moment of its formation, lines the inner surface of that membrane to a greater or lesser extent. When this false membrane is removed the subjacent tunic is found of a deep vivid red colour, occasionally livid & somewhat thickened. This colour is commonly very uniform over the whole space, covered by the false membrane, but is also not unfrequently unequal, & occasionally is altogether wanting, in the greater number of cases, the degree of redness is less than in many instances of dry catarrh. We cannot therefore attribute the plasticity of the secretion in croup, the distinctive features between it and mucuous catarrh, simply to a high degree of inflamation. The false membrane corresponds precisely to the form of the canal which it invests. Its thickness is somewhat greater (as a general rule) in the larynx & trachea, than in the bronchia, & varies from less than half line to a line, its consistence is about that of a boiled white of egg, but this generally demenishes towards its extremities. It is of a white colour, sometimes opaque, some days, or even hours, after its formation, it begins gradually to be detached from the mucous coat, to which, it had been closely adherent, and after being broken into fragments by the cough is sometimes expectorated. The seperation is effected by a more liquid secretion which becoming also concrete and constitutes a second false membrane. This process may be repeated several times in succession, but in general each successive formation is less consistent than the preceding. The croupy membrane is most commonly restricted to the larynx, & upper part of the trachia, but, in other cases it extends over

An
inaugural dissertation
On
Dropsy
Submitted to the examination
of the
Provost, Trustees, and medical faculty
of the
University of Maryland
for the degree
of
Doctor of medicine
by
Thomas W. Duvall
of
Prince Georges County
Maryland.

"Nec aranearum, sane texus ideo melior, quia, ex se fila gignunt, nec noster vilior, quia, ex alienis libamus ut apes."
Just. monit. Philol. Lib. 1.us Cap. 11.um

Dropsy Hydrops from ὕδωρ aqua

Few subjects in medicine, have engaged more of the attention of writers than dropsy. Its frequency, the influence exerted on it by medicine, and the marked character of its symptoms, have each, contributed to obtain for it, this share of attention.
This subject being one of great difficulty, it is not surprising that the opinions, formerly held concerning it, should have been erroneous.
Notwithstanding this subject, has been manifestly improved by the investigations of more modern Pathologists, it still remains somewhat obscure and unintelligible. Formerly diminished absorption was considered, the principal, if not the sole cause of dropsy (viewing it as a disease of direct debility) and the method of cure consisted in stimulating the absorbents. More recently the heart and arteries have been called in question, and increased secretion considered the proximate cause of dropsical effusion. Our knowledge of the Physiology of the absorbents system, is hitherto too

superficial, to decide what share it has in the production of the disease in question, but its dependence on a disturbance of the blood vessels is in many instances very manifest, and of primary practical importance. We meet with dropsy in three different states of the system, the first consisting in sluggishness in, or an actual interruption to the motion of the blood through the veins, the second in an increased action of the heart and arteries, the last in which all the functions of the body participate to wit atony or debility of the whole system. Oedema may be very distinctly traced in many instances to causes, obstructing the passage of the blood through the veins, as ligatures, enlarged inguinal or axillary glands and the gravid uterus. Dropsy consequent to obstructed or enlarged liver, has been ascribed to the same cause. In both instances — venous circulation is thought to be impeded throughout the body. In hepatic cases (particularly from neglected intermittents) the heart and arteries are generally, if not universally involved, and

consequently they are of the acute kind. Dropsy accompanied by increased vascular action is very frequent, and may be either general or local in proportion as either the heart or arteries are concerned. The morbid action of the vascular system which produces it, may consist in either, inflammation or congestion, though, in by far the majority of cases it can be ascribed to the first of these. as examples we may mention ascites accompanying very frequently chronic peritonitis, & Hydrothorax succeeding long continued asthma. Many instances might be forwarded of general dropsy arising from or very intimately connected with this condition of the vascular system. The most frequent are anasarca from exposure to a cold and damp atmosphere, together with the abuse of ardent spirits, uterine disorders &c. This species of the disease has been denominated acute or Inflammatory dropsy, and in it we find a frequent strong and hard pulse, together with cough, pain in some part of the thorax and head increased by a full inspiration. In these cases, a

certain writer mentions the coagulability of the urine on the application of heat as of great importance, a phenomenon which others say is very frequently absent. Inflammatory dropsy is found most frequently in young subjects, and may generally be referred to cold for its remote cause. It attacks suddenly, and frequently proves fatal by the supervention of cerebral symptoms. Atonic dropsy, as we before mentioned, is that, in which every part of the body participates. This form of the disease resembles that colliquative sweating frequently produced by profuse and repeated hemorrhage internal suppuration &c. And is very frequently found therefore in the last stages of Phthisis chlorosis & protracted fevers. We frequently see it among the poor produced no doubt by the want of proper aliment, and also among the higher ranks of society induced by a disordered state of the stomach, and imperfect digestion. This form of the disease was a favourite doctrine with the ancients. They in fact admitted no other species, and were altogether ignorant that

the doctrine of atony or debility is applicable only, to a very small number of the cases of dropsy, with which we meet in practice. This form of the disease is accompanied with a weak and languid pulse, night sweats, coldness of the extremities, and in some instances a strong disposition to erythema petechiae and gangrene. It occurs for the most part in advanced life and in those whose constitutions are broken down by hardship. It steals on as it were gradually and is not referable to any distinct cause. As a high degree of arterial action may take place or the powers of the system become much prostrated, without the simultaneous occurrence of dropsy, it appears that there is something yet wanting to render the analysis of the proximate cause complete. We may remark that as under certain circumstances of diseased action there is a peculiar disposition to hemorrhage, so in others there is a tendency to hydropic effusion. A strict definition of this hydropic disposition is totally beyond the reach of our limited abilities.

The hypothesis of its being pressure on the veins is ingenious, and apparently confirmed by experiment, but can neither apply to inflammatory dropsy, nor that succeeding hemorrhage or chlorosis. Some have suggested the idea, that it depends on some peculiar condition of the nerves or a want of consent between the capillaries and large vessels in point of function. We deem it useless to pursue this matter any farther as we have nothing more to say than what has been already said concerning it. The symptoms of this hydropic diathesis, generally enumerated, are paucity of urine, thirst, oedema of the feet & ankles and a peculiar expression of countenance which has been denominated leucophlegmatic. Having now enumerated those divisions of dropsy founded on the consideration of their symptoms, we shall proceed to notice such as are referable to the many morbid phenomena observable after death. On a post mortem examination of those who die dropsical various morbid appearances present themselves. In the thorax we find in some—

instances enlargements of the heart, diseases of its valves, adhesion of the heart to its pericardium, ossification & aneurism of the large arteries, with inflammation of their internal tunics; in others the morbid phenomena are seen to occupy the lungs, such as tubercles, vomicae, and induration from the effusion of lymph into their substance. Dropsy connected with any of the above mentioned conditions of the thoracic viscera generally assumes the form of hydrothorax, anasarca, or their combination. In the cavity of the abdomen we find inflammation and adhesion of the peritonaeum, enlargements of the spleen and liver, diseases of the mesenteric glands, and in some instances schirosity of the stomach with ulceration of the instestines. Dropsy consequent to any of the above named species of abdominal disease, generally takes on the form of ascites, with which anasarca is frequently combined. Though there are some few cases of the disease in question of merely a local nature, by far the majority of them (connected as we have seen with

diseases of the thoracic and abdominal viscera, over which medicine exerts so little influence) are of a dangerous character. It generally indicates a broken constitution, and a failure of the powers of life. The duration of the disease varies according to the peculiar circumstances, or predisposition of the individual affected. In some instances dropsy of the acute kind proves quickly fatal, but in most cases the disease advances slowly to a fatal termination. Of all the forms of this disease, Hydrothorax is perhaps the most fatal, and certainly the one over which medicine has least influence. As in all other diseases, so in this, much of course depends on the early administration of remedies to obtain a favourable termination. With these remarks concerning the pathology of dropsical effusion, we proceed to offer a few observations concerning the symptoms and treatment of the three principal varieties of dropsy with which we meet in practice. viz anasarca, Hydrops Pectoris and ascites. and — first of anasarca from ava. per & σαρξ, caro. a preternatural

deposition of a serous like fluid in the cellular membrane immediately under the skin.
This species of dropsy is first discovered, by oedema of the feet and ankles in the evening, disappearing again in the morning. The swelling is soft and inelastic, and when pressed with the finger, retains its mark for a considerable time, the skin at the same time becoming paler than usual. The swelling gradually ascending occupies the thighs and trunk, and finally even the face and eyes become bloated. The skin is dry and harsh. There is also observed a sallowness of the countenance with torpor and drowsiness, the urine is scanty, highcoloured, and on standing deposits a red coloured sediment, sometimes however it is paler and more copious, the bowels are generally constipated, and a considerable degree of thirst, with emaciation of the body prevails. In some instances the water oozes out through the pores of the skin, in others being too gross to pass by these, it elevates the cuticle in the form of small blisters. In depraved habits, petechiae, erysipelas and gangrene follow. Anasarca arises

from many causes which concur in producing debility of the whole system. Hence we observe it succeeding — profuse hemorrhagies (whether natural or artificial) protracted fevers, and also in the last stages of — Phthisis, Diabetes and amenorrhoea. In these cases, the effusion commences slowly and as it were imperceptibly; in others the attack is sudden; and to the causes of the disease in this acute form we next direct our attention. Exposure to a cold and damp atmosphere frequently produces dropsical effusion. In this variety of the disease the pulse is found for the most part strong and hard, together with symptoms indicating an affection of the thoracic viscera.

It may also arise from the excessive use of ardent spirits and in this case if the attack is sudden, it will be accompanied with the symptoms above described of dropsical effusion acknowledging cold for its remote cause. A disturbance in the functions of the uterus is likewise said to be a cause of dropsy. In this case it is most frequently (but not universally) of the atonic kind, as evinced by the hardness of the

pulse, hemorrhage, pain of the head, and other symptoms indicating increased action of the heart and arteries. This disease frequently succeeds the eruptive fevers, and has in those cases, been thought to depend on some morbid condition of the cutaneous exhalants, (the consequence of the eruption) a circumstance by no means improbable. The concomitant symptoms generally indicate some obscure affection of the thoracic viscera existing at the same time; and under all circumstances, probably we will not err in viewing it as a constitutional affection, and in being more solicitous about the state of the general system, than that of the skin.

In the treatment of anasarca three indications are to be fulfilled; The first is to restore a due state of the circulation, the second is to evacuate the fluid already effused, and the third to restore the tone of the system, the loss of which in some instances may be considered the cause of the disease. The means calculated to fulfill the first object must vary of course, according as the disease is acute or atonic. In the acute kind we should endeavour to lower the tone of the heart

and arteries, and thereby lessen the impetus of the circulating fluid on the capillaries. For this purpose venaesection is absolutely necessary, though many authors seem to have overlooked it entirely. (perhaps under the belief that purging would accomplish the object better) but we consider this of secondary importance in fulfilling the indication.

In atonic dropsy, or that which attends obstruction of the viscera the indications of cure consist in restoring the tone of the system, removing (if possible) the glandular obstruction and exciting to action the absorbents. The tone of the system is to be restored by stimulants and tonics, the glandular obstruction may be removed by deobstruents (as mercury) which also excites the action of the absorbents.

In fulfilling the second indication recourse is had to punctures setons, or epispastics and to the excitation of certain serous evacuations. Punctures, scarifications, setons and blisters, are objectionable on account of the great disposition to gangrene in parts where dropsical effusion exists.

The other mode, in which the fluid deposited may be carried off, is the administration of emetics, diaphoretics, diuretics & purgatives each of which, (in proportion to their evacuating effects) tend to increase the action of the absorbents. Emetics have been frequently administered in Hydropic diseases, with a view of promoting absorption, and cases are mentioned of their proving successful. But in our opinion they should be rejected in most cases, both on account of the unnecessary distress they give the patients, and on the ground of their incompetency to fulfill the desired indication. Diaphoretics have also been frequently employed in the treatment of this disease, particularly in cases supposed to arise from suppressed perspiration, and although there are some well attested cases of their proving successful, we think it will be found very difficult, if not impossible to obtain any decided benefit from the administration of this class of remedies in dropsical effections. Diuretics though universally acknowledged as remedies of great importance

in the treatment of hydropic diseases, still great diversity of opinion exists as to the modus operandi of some individuals of the class.

Since we are informed of dropsy's being cured by simple diluents, and being ignorant in what manner they can influence the absorbents, we think it rational to infer that the beneficial effect of diuretics in hydropic diseases, cannot be solely confined to any direct action of theirs on the absorbents, on the contrary we think the phenomenon is to be explained in the following manner.

By the administration of diuretics in hydropic diseases, we excite the action of the renal emunctories, and cause them to pour out a large quantity of a serous like fluid, thereby diminishing the general mass of this portion of the circulation, and consequently the effusion from the vessels furnishing the hydropic fluid. Now if by these means the exhalation from the capillaries be diminished, and the discharge from the renal emunctories kept up, the absorbents will we think drink up the accumulated fluid

although their action be not increased.
But independent of this effect of diuresis in diminishing hydropic accumulations, there are others, which perhaps take place simultaneously with those above mentioned, further increasing the efficacy of diuretics in dropsy.
We have already mentioned that depletion favours in a decided manner the absorption of effused fluids, hence when the blood vessels are suddenly deprived of a portion of their serous fluid, by exciting the action of the renal emunctories, nature, endeavouring to sustain the necessary proportion of this component part of the circulatory mass, rouses the absorbents to a more vigorous action, in order to supply the then existing deficiency.
With these remarks on the modus operandi of diuretics generally, we proceed to notice the principal individuals of the class.
and first of the sales neutri; that these salices are taken into the circulation, and produce diuresis

by stimulating the secretory vessels of the Kidneys, is we think sufficiently evident from their being detected in the urine voided after their administration. This is rendered still more probable from the fact, that when they prove purgative and are thereby prevented from being absorbed by the rapidity with which they pass through the alimentary canal, they have little or no diuretic effect. In order to obtain the full diuretic operation of these articles it is therefore necessary to give them in small quantities frequently repeated, to prevent their producing cathartic, and to accompany them with plentifull dilution.

The radix scillae is another article which has been deservedly celebrated from the most ancient times as a remedy in hydropic diseases. From the well known fact, that when this root is given in dose large enough to produce vomiting or purging, it fails in its diuretic operation, we think it probable, it is taken into the general mass of the circulation, by which it is conveyed to the renal

emunctories, there exciting the secretory vessels by virtue of its stimulant properties.
The last article of this class to which we shall advert is the Digitalis Purpurea, concerning the modus agendi of which as a diuretic, and its administration in dropsical effusion great diversity of opinion exists even at the present day.
By some this remedy has been extolled for its power in dropsical affections, and has by them been particularly recommended (considering it to have the specific power of stimulating the absorbents) in cases where the pulse is feeble or intermitting, the body flaccid, the skin cold and the countenance pale. Others considering the diuretic effect of this article to be dependent solely on its sedative influence (as evinced by the latter uniformly preceeding the former) condemn its use in cases of general debility and relaxation.
We, ignorant in what manner digitalis can stimulate the absorbents without at the same time stimulating the system generally, (a property which no

one who has experienced its effects on his own person can attribute to it) think, that its diuretic properties are to be ascribed solely to its power of restraining the impetus of the circulating fluid on the exhalants, and not to any power it can have of stimulating the absorbents, or of exciting directly the action of the renal emunctories. Before dismissing the subject of diuretics we will remark, that their operation is generally promoted by combination, and by the simultaneous use of mercurials, as calomel internally, or mercurial friction externally.

The last, and perhaps the most important class of remedies for promoting the evacuation of the effused fluid in dropsy, are purgatives.

These substances by irritating the exhalants of the intestines, cause them to pour out a large quantity of this necessary constituent of the blood, in consequence of which the absorbents are called upon to supply the loss. In this way, we think cathartics prove successful in the treatment of Hydropic diseases, and not by any stimulant influence they

can directly exert on the absorbents simultaneously with their evacuant effect. In order to fulfill the third indication in the treatment of this disease, (or to strengthen the system after the evacuation of the effused fluid,) the administration of tonics, together with exercise and frictions become necessary. Having now dwelt sufficiently long on the remedies used, and their modus operandi in anasarca, we proceed to the consideration of Hydrothorax. from ὕδωρ aqua and θωραξ. Thorax. a preternatural collection of a serous fluid in the cavity of the chest. Dissections, of those who die of this disease, show that the effused fluid is either collected in one side of the chest, or that there are hydatids formed in some particular part of it, but they more frequently discover effusion in both sides of the chest, accompanied by a collection of fluid in the other cavities of the body.

The symptoms indicating the existence of Hydrothorax are oppressed respiration, particularly on motion and when in a recumbent posture, a sense of weight or oppression, referred for the most part to the scrobiculus cordis, sudden starting from sleep with anxiety and

palpitation of the heart, irregularity of the pulse, cough accompanied by expectoration of a matter resembling albumen, leucophlegmatic appearance of the countenance, Oedema of the feet and ankles, thirst, paucity of urine, which is high coloured and on cooling deposits a red sediment, and in some instances a sense of fluctuation is perceived on motion. Of the pathology of Hydrothorax we have nothing more to state, beyond what we have already said of dropsy generally. The method of treatment above recommended for anasarca is equally applicable to this form of dropsy, with the exception perhaps, that diuretics are more proper in the latter than the former disease. The paracentesis thoracis though frequently proposed has seldom been resorted to in this disease. That it may be executed with safety we have no doubt, and that it has been practiced successfully seems to be well authenticated; but to what circumstances of the disease the operation is most appropriate we are at a loss to determine.

The next and last form of dropsy to which we shall advert is that called ascites from ασκος uter. A preternatural

collection of a serous like fluid in the cavity of the abdomen. In most cases the water is contained in the peritoneal sack, or general cavity of the abdomen, but sometimes it is found in one or more sacks formed upon and connected with some of the viscera and is then called encysted dropsy. Ascites is frequently preceded by loss of appetite, inactivity, dryness of the skin, difficulty of breathing, diminution of the urinary discharge and costiveness. Shortly after the manifestation of these symptoms, a protuberance is perceived commonly in the hypogastric region, which gradually increases untill the whole abdomen becomes uniformly distended and tense. As the collection of water becomes more considerable the difficulty of respiration is increased, the countenance becomes pale, a great degree of thirst attends, the skin is dry, the urine scanty, highcoloured, and on standing deposits a lateritious sediment, the pulse is generally more frequent but sometimes slower than natural. The causes, which produce ascites more frequently than the other varieties of dropsy are peritoneal infla

mmation both acute and chronic, a diseased State of the abdominal viscera particularly the liver, local injuries &c &c &c.

The cure of ascites should we think be commenced with venaesection, diuretics, deobstruents, or cathartics according as they seem to be indicated, and if after fair trial they fail, recourse should then be had to the operation of Paracentesis abdominis in order to draw off the accumulated fluid, and thereby give some temporary relief to the miserable sufferer.

Having as we suppose, spoken sufficiently above of the causes of atonic dropsy, it is only necessary to make a few remarks on the method of cure in such cases, which it is evident should be attempted by tonics and stimulants. Among the stimulants the ammoniated Tincture of Guiaicum is recommended by Professor Potter as singularly efficacious in these cases. This together with chalybeates, friction, and moderate exercise on foot or horseback, will universally effect a cure in atonic dropsy unless the powers of the system be so far prostrated as to render recovery impossible.

Finis

On

Rheumatism

A

Dissertation,

Submitted for Examination

To the

Provost, Trustees,

and

Faculty of Physick

of the

University of Maryland.

By

Richard Norris

of Virginia

1828

The subject I have chosen for an Inaugural Dissertation is one which has occasioned as much excruciating torment, to the Human Family as any other within the covers of a Nosology, I allude to Rheumatism, The term itself is derived from the Greek verb ῥέω. to flow, hence ῥευματισμος a defluxion a name given it when the Humoral Pathology prevailed which supposed the disease to consist in a morbid affluxion to the part.

It is divided into the Acute, or Rheumatalgia and the Chronic.

We shall first treat of the Acute, this division has been objected to, because it does not indicate the quantum of Fever present in the two varieties the word Chronic refers, to the time the disease lasts and not to as before observed, the severity of the symptoms, The common remote cause of the disease is Cold applied to the body when it is heated; though if there is a predisposition to it, which predisposition can only arise from, the Physical conformation

of certain parts, it may be excited, by any of the causes of Inflammatory Fever.

The Subjects of the Acute variety are chiefly the Young & Vigorous, though persons of all age and temperaments may be attacked by it, Cold will produce it in any person. The seat of the pain is various, sometimes it is in one Joint again it occupies many at the same time, It shoots along the course of the Muscles, & fixes itself in some one of the Joints.

From the part affected, the disease has received different names. When it fixes on the Lumbar region. It is called Lumbago, when on the Hip Sciatica, when on the Thorax Spurious Pleurisy Notwithstanding this variety of names, the treatment is pretty much the same in all, these varieties Wherever, there are Muscular fibres, this disease may exist. It is principally an affection of the Fascia & requires the same treatment whether the disease be seated in the Heart

in the Muscles of the Arm or Eye. It is said not to be quite so inflammatory, when it attacks the Hips Lumbar Region &c

Acute Rheumatism is greatly increased by any requiring the use of the Muscles. hence Patients are apt to remain in that posture, requiring the least use of the Muscles, as on the back.

If it continues long fixed in one point it is probable that the disease will be obstinate and injury done considerable. If it shifts its place often, it is a better sign; this is apt to take place in the night. when the disease is most severe, it generally remits in the morning, and exacerbates, in the evening; this is not always the case. When the pain has continued for some time, the parts become red, and swollen. The Inflammation is of a peculiar kind, never scarcely ending in suppuration. Dr Potter says

it does sometimes, end in suppuration in scrofulous subjects. This swelling is generally brings relief, though not always complete. These symptoms are always attended with fever, the pulse being, full, frequent and hard.

Rheumatism as before observed scarcely ever ends in suppuration, most generally by resolution. Critical evacuations seldom take place in this disease and when they do, they do not bring that relief which they do in other diseases.

Authors have dwelt much on the diagnostics between this disease & Gout, though it seems to me that they are very plain. The Ancients supposed there was no difference, and even the Illustrious Rush considered the Gout as the rich mans Rheumatism and Rheumatism the poor, mans Gout.

Rheumatism attacks the larger Joints, Gout

the smaller, Rheumatism, attacks the strong, and those who have been exposed to cold and damp. The Gout always, the debilitated, from mode of life, or those who are hereditarily predisposed. It is always preceded by certain Gastric disturbances. Rheumatism, never. it has no gastric connexions whatever. In short by attending to the predisposition, general health premonitory symptoms, & seat of pain; subjects of attack &c, we may always very safely & correctly pronounce what the disease is. It is sometimes difficult to distinguish, Rheumatism in the Lumbar region, from Nephritis, Calculus in the Ureters, may be known, by the vomiting, frequent, & painful micturition, &c. In Lumbago there is an increase of pain, from exertion of the Muscles of the part.

It attacks as before observed those of a full, plethoric habit, The Cachetic are very liable to it, and when it does supervene to a scrofulous habit, it is very

difficult of management frequently, prostating the patient so much, that the reenperative powers of nature cannot restore him; and these are the only cases in which it ever proves fatal.

Cold will produce it in any subject. It is most common in those countries, subject to vicissitudes of temperature, changes from a warm and dry atmosphere to a wet & cold will produce it in any person.

Sydenham, supposed, the use of Peruvian Bark to be a cause of this disease, there is no doubt, but, that where there exists a tendency, to acute Rheumatism, that it will be aggravated by the use of Bark,

The treatment of acute Rheumatism is plain sailing, Bloodletting, is our main dependence and sheet anchor we do not bleed so much with a view to allay pain instantly, as to quiet excitement of the Heart & Arteries, & subdue action, the employ the Lancet with the same view that we do in simple Synocha, After this we follow up the indication pointed out by Nature and

give Diaphoretics, & for this purpose nothing answers better than Dovers Powders. Cathartics do not seem to answer so well in this disease. The bowels should be kept regular. Small doses of Calomel and Opium have seemed frequently to shorten the disease. Opium by itself is apt to aggravate the symptoms.

There has been, and still is, a great confliction of sentiment, among Authors & practitioners, with regard to the use of Bark. In the very debilitated it seems to be indicated & has been used with advantage undoubtedly; but generally it is very apt to aggravate the disease; if there is any fore disposition to the acute variety, but in the decline of the disease where it assumes the Intermittent type, it may be administered with advantage.

The Diet in acute Rheumatism should be light and such as is not likely to excite action. High seasoned food must be avoided. this must be very particularly attended to. Distilled and Malt Liquors must be avoided throughout the disease. No person can be restored to

perfect ease & health who indulges either in Meat or Drink - Rules with respect to Diet seem not to be sufficiently insisted on by Authors, & Practitioners.

The Temperature of the Apartment where the Patient is confined, should be as uniform as possible Some advise that the Patient should be kept warm with Blankets, As a general Rule the apartment should rather incline to be be cool, A practice has prevailed in Regard of applying Ice to the affected part in Acute Rheumatism This practice it seems to me should never be followed,

Most topical Stimulating applications are improper in Acute Rheumatism, Topical bleeding generally far inferior to General Stimulating applications are apt to produce a metastasis from one Joint to another

Should any means be pointed out by nature of curing the disease, by critical evacuations

as by sweating Haemorhage, eruptions &c they should be encouraged

Where the ~~[illegible]~~ means pointed out for the cure of the Acute variety have not been vigorously and properly used, that form of it is very apt to succeed which is called, The Chronic Rheumatism, though it frequently comes on in this form without any premonitory acute symptoms, and on this account it seems that it ought to be arranged as a distinct Genus,

Chronic has several varieties, It sometimes fixes on the Loins, Hip, Knee, There is not so much fever in this form, generally little, or none Heat of the skin is little increased, pulse very slightly accelerated, skin rather pallid, perspiration, with difficulty brought on, and that is very characteristic, of this species, considerably, acleiated, by the application of warmth, The continuance of the disease is indefinite, sometimes it comes on only at certain seasons

of the year, and at other times, it is felt only at certain seasons of the year, at other is felt at every change of the weather, from dry to damp, most generally, when it has once appeared in the Chronic form, it will continue through life, being more violent in Spring and Autumn in short at those seasons of the year, when vicissitudes of temperature are most frequent Such Patients have very justly been called living Barometers, for they can with great certainty predict changes in the Weather

The Subjects of this variety are principally those advanced in life; those who have been much exposed to Cold and damp, Sailors are not so subject to it as Soldiers In short cold will produce it in any person

There is a Paralytic variety of this disease produced by the fascia thickened by disease preying on a nerve,

3

With respect to the treatment of this variety of disease the practice, first adopted and pointed out by Tothergill, is the one that is now pretty much followed and approved of, that of giving Calomel and Opium. He says "my inducement to make trial, of this method at first was, that this kind of pains ~~were~~ desperate, in the most fleshy parts of the human body, and to which it is extremely difficult to convey the efficacy, of any medicine entire, either given internally or applied without; and that as Mercurials of all remedies, we are acquainted with, most certainly pervade, the inmost recesses of the Muscular, and Tendinous parts, and remove diseases there seated, he was induced to make trial of them & found them to answer admirably.

Mercury is now given to restore sensibility, when the fever is slow, and the system torpid

Venesection cannot be carried to the same extent as in the Acute variety, though where the subject is of a full habit &c we must bleed.

It is of the utmost ~~variety~~ importance in this variety to attend strictly to the Diet of the patient, let him drink neither fermented nor distilled liquors.

Capt Cooke says in Otaheite, the Natives cure the disease by hanging the patient up by the affected Limbs. In Africa they cover them up in the hot sand, which acts pretty much on the same principle as the Warm bath, which is not now sufficiently used, for in many cases it is a powerful remedy.

Tart. e Antimony, is an excellent remedy in some cases.

Blisters frequently of great service particularly after Inflammatory action, has been subdued.

The Warm Bath may be used to induce

Diaphoresis. The Warm Sulphur Spring Bath almost a specific in the Chronic Rheumatism. We should be careful that we do not use either of these last named remedies until action has been subdued, for if we do, we may stimulate our Patient into a fit of Rheumatalgia,

All persons who are subject to Rheumatism should wear flannel, next the skin, and avoid as much as possible exposure to Cold & Damp especially when the body is heated.

Guiacum is a remedy which has been very much extolled in this disease, as a stimulant it is best, in the form of Ammoniated Tincture.

Tartar. emetic ointment is frequently used with great advantage,

Sulphur. is a remedy which answers admirably, in many cases. hence Sulphur Waters are considered almost specific

in this disease when of the Chronic variety —

Arsenic was very highly spoken of & recommended by the late Dr Barton,

The Phytolacca Decandra, or Poke Root is an indigenous article which has attained some celebrity in the treatment of Rheumatism —

The Tincture of the seeds of Stramonium, has been used both internally & externally,

The inner bark of the common Holly, in infusion will increase the perspiration, & secretion of urine and has cured some of the worst cases of Rheumatism

Bandaging in cases of chronic Rheumatism is an excellent remedy, where there is nothing more than weakness.

These are I believe the principal means that have been recommended for the cure of Rheumatism

An inaugural Dissertation

in English on Vaccination

Submitted to the examination of the Provost trustees and medical faculty of the University of Maryland for the degree of Doctor of Medicine

by

Robert Stuart McCaig

On the day of

To

Nathaniel Potter M. D.
Professor of the practice of medicine in
the University of Maryland this first
essay of his friend and pupil is dedi-
cated as a testimonial of his friendship
and affection and an humble acknow-
edgement of the gratitude he owes for
the many excellent and useful precep
he has received from him, by the
author.

Robt. S. McKaig

Preface

The author of the following pages feels himself compelled in his own justification to make some apology for the hasty and indegant manner in which they are composed. A long continuance of indisposition prevented him from writing before the close of the term, and an increased illness left him but a day or two before the commencement to prepare these pages. The author therefore humbly solicts for his first essay all the favor and indulgence usually granted to the first born of literary efforts. The authors, that he has consulted with the most freedom are Dr Stephen Brown of New York and the reports of some committees in the medical recorder. But the author claims no hugeement for this production than that of a careful computation and collation of facts and opinions taken from the best authors to whom he had access, with occasional comments and remarks of his own.

The author

A dissertation on Vaccina

Opinionum commenta delet dies, naturæ judicia confirmat. Cicero.

Man in a state of health and constitutional integrity, before the ills and misfortunes of life have broken his energy or saddened his countenance, may with propriety be denominated the pride and glory of creation. While he walks forth with grace and dignity in his mien, "his fair large front and eye sublime declare him absolute" — the master-spirit of the scene in which he moves, and nature in all her works fondly acknowledges, and pays to him the tribute and the homage of her great superior. But as the towering mountain, whose lofty top surveys with proud supremacy the valleys lying far beneath, has its fair sides furrowed and wasted by the streams that issue from its centre, or its very bowels rent by inward fires so man is the subject of diseases, which like the bursting earthquake or the electric flash produce immediate ruin and disorganization, or by a slower and more chronic operation, like the descending mountain stream waste and deform his stately figure, undermine his health, poison his happiness and cut short his existence. Many and various are the outlets of life, but that class of diseases denomenated contagious, from their disposition to become epidemic have in all ages of the world been found most extensively destructive of human life: and for its loathsomeness and mortality small-pox stands pre-eminently conspicuous at the head of this class of diseases. From the continu

records we have, it appears that this hideous, fatal scourge of mankind reigned with unabated fury from the beginning of the sixth till the close of the seventeenth century and in its desolating ravages, swept off as with the besom of destruction thousands and tens of thousands, without the healing art being able to oppose one serious or available barrier to its progress. History seems to fix its origin in the east, probably in India or China, from whence it spread into Arabia, where it reigned and spread with its kindred curse Mahometanism. Its introduction into England and the west of Europe must be attributed to the Crusades formed against the Saracens in the eleventh century for the recovery of the holy land. Many nations being engaged in this enterprize, the whole of western Europe and the countries intervening towards the east, were almost simultaneously inoculated with this loathsome disease. From that time forward, like a foul Harpy, it gluted its insatiate ruthless appetite on the youth and beauty of the land; and if by chance one proved superior to its power it left upon his person, the well marked vestiges of dread ed ravages. But this fell destroyer of our race like Lucifer was doomed to fall, for by the mind of the immortal Jenner, an ægis was discovered which enables us to pass unscathed through the midst of its pestilence. Since the introduction of vaccination by this benefactor of his species, we may ask where are the numerous vestiges of its fright ful ravages that once existed. It is now as rare to see a person disfigured with the small-pox as it was common formerly. Let us then rally in firm

phalanx around the standard which Jenner has raised, and defend it from the assaults of ignorance, prejudice, and sordid avarice; but above all let us shield it from the dangerous enemies to be found in that profession, to whom mankind look, in the hour of tribulation, to ward from them, by the aid of a benign providence, the wrath of the destroying angel. Although the history of vaccination has been but the history of its uniform and ascendant progress over all obstacles, whether of ignorance, prejudice or avarice; still there have ~~not~~ always been those who, unwilling or unable to survey the whole subject, have preferred to rely on their own limitted experience of a few doubtful cases and reject the boon of Jenner rather than yield assent to a mass of evidence such as has rarely, if ever been accumulated in any other department of human investigation. The doubts and hesitancy of such individuals ought not, and it is believed will not prevent the extension and ultimate triumph of vaccination; when the variolus contagion like the Jewish leprosy shall cease to deform & destroy the human race, the dogma of Willis "Convenit enim homini omni, soli et semel variolis aut morbis affici however true it might have been previously to the researches of Jenner, is now no longer true or accepted. In the brief remarks which we propose to make on the subject of vaccination we shall consider first the nature and ~~of~~ the kine-pox and the time of its discovery; secondly the nature and extent of its prophylactic power and the causes of its failure to prevent the small-pox. According to Jenner who is the best

authority we have on this subject, this disease appears on the dugs of cows in the form of irregular pustules. At first they are of a palish blue, approaching to a lived colour and surrounded by inflamation. These pustules sometimes degenerate into phagedenic ulcers that prove troublesome. The animal becomes indisposed and the secretion of milk is lessened. When the disease is in this stage it is most readily communicated to the milkers. Its first appearance in them is in the form of inflamed spots on different parts of the hand at first assuming the appearance of small vesications, but afterwards going on to suppuration. As to the nature of the vaccine disease we are unable to say any thing from our own observation or experiments and must therefore be content with consulting and citing the authority of others. Dr Jenner was of opinion that what is called the kine-pox does not originate among the cows; but from a disease in the heel of the horse, termed by farriers the grease And here let me observe that there are two diseases in the horse very much alike, the one called grease the other the scratchy heel. Experimenters having taken matter indiscriminately from these two diseases have sometimes succeeded and at others failed in producing any constitutional impression. The lymph taken from the scratchy heel of a horse, which is in every respect like the grease, has been found to be incapable of producing any effect, and hence we may account for the discrepancy of opinions and experiments on

this part of the subject. Jenner supposed that the limpid fluid issuing from the fissures in this disease (the grease) being communicated by the hand of the hostler who dressed the sore, to the dugs of the cow produced in them the cow-pox. Dr Stephen Brown of New York declares it as his unquestioned belief, that the cow-pox is the variola of the human subject; and that it was originally excited in the cow in the form of cow-pox and in the horse in the form of grease by the direct application of the small-pox virus to these animals. Although there is unquestionably a great similarity both in the appearance and progress of the variola in the human subject, and these diseases in the horse and cow, yet we think there are scarcely sufficient grounds for believing in their identity. The organization and function of the tissues of these inferior animals are in many respects like our own and we see no good reason for not believing that they are or may be subject to the same pathalogical condition. We know that the inferior animals are subject to other diseases not contagious, that have appeared in the human subject. However if they be the same disease, the virus must be essentially and materially altered and modified by passing thro' the system of the cow, for the disease in them is never communicable, except by direct contact and is always mild safe and divested of all the virulence of the human variola. The existence of the disease now called cow-pox seems to have been known from time immemorial among those classes in the western counties of England, occupied in the business of dairies, but the enquiring gen-

nies of Jenner was the first to take hold of this well-known fact and ~~turn~~ make it subserve the highest interest and happiness of his fellow beings. He commenced his enquiries and experiments on this subject in seventeen hundred and ninety six and two years afterwards he published the result of his observations in which he fully set forth and established the prophylactic powers of the kine-pox. From that time forward the cause of vaccination continued to prosper and to triumph over all opposition until this sacred boon, by our familiarity with it, lost in some degree, that respect which its inestimable worth aught to inspire ~~in~~ the minds of physicians who were its sole depositories, and a long immunity from the disease it is calculated to prevent, has made them careless in the manner of applying it. We shall now proceed to consider the nature and extent of its prophylactic power and the causes of its failure to prevent the small-pox. And here we would say that Jenner's immortality seems chiefly due, to this that he was the first to discover and successfully practice the art of substituting a mild and safe animal poison, to effect a modification of the human constitution which previously had only been produced by a harsh and often fatal one. It appears ~~then~~ that the vaccine virus is endowed by a kind providence with such a degree of mildness that it may be introduced into the human system with impunity, and that being thus introduced it is capable of so modifying the constitution, as in most cases entirely to supercede the influence of variolous contagion.

We will now proceed to examine the extent of the prophylactic power of vaccination and here we must draw largely from the medical statistics and laborious researches of others. From the enquiries of Mr Caspar on this branch of our subject it appears that the small-pox formerly destroyed from one twelfth to one tenth of the population, now not more than one in one hundred and sixteen die of this disease. This shows a most obvious and gratifying diminution in the general mortality of small-pox effected by vaccination. One of the foreign vaccine ~~vaccine~~ establishments reports that out of two million six hundred and seventy one thousand six hundred and sixty two persons, who had been properly vaccinated there, only seven had the small-pox afterwards, and in the London foundling hospital during ninetien years only two cases having any resemblance to small-pox occured among those vaccinated there. Out of forty two thousand six hundred and sixty two persons who were vaccinated at the London small-pox hospital, one only had the small-pox afterwards in any form. But it is useless and impracticable here to multiply numbers or authorities on this part of our subject, suffice it to say that all the reports of public institutions abroad and of medical societies and private practitioners in every part of our country hail us with the same gratifying result, establishing conclusively the efficacy of the prophylaxis when timely and skilfully used.

It remains for us now to point out some of the

most common causes of its failure to prevent the small pox. And here we may observe in the first place that it was the opinion of Sydenham and others conspicuous in the profession of medicine, that there is in certain seasons, a peculiar constitution of the air which disposes the body to certain diseases especially of the eruptive kind. The years 1833-4 were remarkable instances of this kind. During these epidemic constitutions of the air the contagion of small pox, Rubeola Scarlatina &c not only appears to be more easily propagated and to spread more rapidly and extensively, but to be much more virulent and fatal in its character. In these seasons when the variolus virus seems to be highly concentrated and the susceptibility of the system greatly increased, the vaccination even when properly and skilfully applied has failed to protect ~~those~~ some of those who depended on it. But in these seasons we often meet with second attacks after inoculation with variolus matter, or attacks of varioloid and even second attacks of variola itself. There appears also in some persons ~~to be~~ especially those of the phlegmatic temperament, to be a constitutional insusceptibility to the disease which prevents any of the prophylactics from making any impression on the system and which often for a series of years resists the effects of variola. Another very frequent and disgraceful cause of failure may be found in the negligent and careless manner in which the operation

s performed either by nurses or by vaccinators who were not physicians and often in the carelessness of regular physicians who never see their patients afterwards and consequently know not whether or not it had any effect. The causes of failure as enumerated by Jenner and others may be ~~enumerated to~~ comprized under the following heads. First inoculating with matter taken from an imperfect pustule or from a patient laboring under some other disease at the same time — from matter taken at an improper stage of the kine-pox — from the matter although good being inserted and the disease progressing while some other disease existed in the system — from the place where and the manner of inserting the virus — and breaking the vesicle in the early and forming stage. This is doubtless a fruitful source of failure for those who are vaccinated are generally children and when the pustule becomes itchy they will often scratch it and thus the matter will be discharged before it has had time to saturate the system and thus produce such a modification of the constitution as shall protect them from the operation of varolous contagion. The prophylactic effects of vaccination have been said to cease after eight or ten years, others that it is exhausted about the age of puberty when the constitution seems to undergo a considerable change. To obviate these difficulties, physicians generally

agree in recommending a revaccination which is said effectually to protect the system ever afterwards against the small-pox. From all the testimony which we have had access to and time to examine we are clearly of opinion that vaccination when properly administered and when efficient matter is used and the system in a proper state for its reception will in all ordinary cases protect the system against the operation of variola. And in those few cases in which it has failed entirely to prevent the disease, we have this consolation left, that though we may be wounded by its shafts, they are deprived of their venom by the guard we have thrown or may throw around us. In other words, if we cannot always avoid the small-pox, we may protect ourselves by vaccination from much of the suffering and almost entirely from the danger of that disease. Finis

Robt. L. McCraig

Fin

An

Inaugural Dissertation

On

Hydrophobia

Submitted to the Consideration

Of

The Revd. Bishop Kemp Provost.

And to the

Regents of the

University of Maryland

For the

Degree of Doctor of Medicine

By

Charles M. Yates

1825

To the

Professors of Medicine

In the

University of Maryland –

This Thesis is Dedicated

In respect to their Talents –

And in Gratitude for the Benefit

Derived from their Instructions –

By the

Author

To

Doctor Samuel Baker

Dear Sir,

The high opinion, which, in common with others, I entertain of the talents which distinguish you as a physician, strengthened by the success of your practice, and by the important lessons received from your instructions, is a sufficient reason for my dedicating this humble attempt to you and expressing myself with feeling to be

Your respectful friend

and Pupil

Chas. M. Yates.

Introduction.

Hitherto the combined efforts of Genius and experience have been inadequate to clear away the doubt and obscurity, which envelope the subject of Canine madness. Yet the peculiar malignity of the disease and the interest with which it is from this circumstance invested, make imperious demands upon the attention of the Medical world, and invite their consideration with the hope, that one day or other some more fortunate Genius may draw aside this curtain of obscurity and by elucidating ~~the~~ its Pathology, rob this Tyrant of diseases of all its Terrors. If I, in the brief course of my remarks have been so fortunate as to offer one fact or suggest one observation on which superior talents or better experience may build, I shall esteem myself sufficiently rewarded. — — —

Hydrophobia.

Dr Good defines this desease as follows:- "Spasmodic Constriction of the muscles of the chest;- supervening on the bite of a rabid animal; preceded by a return of pain and inflammation in the bitten part; great restlessness, horror, and hurry of mind:" In the foregoing definition there is not so much as mentioned the prominent symptom from which this disease takes its name: instead of this he uses the Greek word Lyssa as more applicable

The dread of water or Hydrophobia is not

confined to canine madness but is common in many other diseases and is produced by many other causes besides the bite of a mad dog? —

Dr Rush gives us the following causes cold night air; a wound in a tendinous part; putrid and impure animal food; worms; eating buck nuts; great thirst; exposure to intense heat; drinking cold water when the body is very much heated; and many other causes which are of too great a number to mention. All this seems to argue something against the term in common use and the one under which I am writing; but I have not chosen this term because I thought it the most correct but because it is the most common —

It has been a question whether this disease ex.

-er arises spontaneously. I am inclined to think it does in the Canine Species.-

Hillary says it is endemial to the dog kind in the West Indies and Dr Rush says that it often prevails as an Epidemic in the back Country of the United States: but that the same disease which is communicated by the bite of a rabid animal is spontaneous in the Human species is very doubtful: A dread of water is sometimes observable without the true desease yet this is entirely different from the desease under consideration

It is supposed by Dr Rush to be a "malignant fever" and offers the following proofs in support of his opinion. 1st That the disease in rabid animals is a fever - 2nd The disease

called Canine Madness prevails occasionally a-
-mong dogs at those times in which malignant fe-
-vers and Epidemic" 3rd Dogs when they are said
to be mad exhibit the usual symptoms of fever,
such as want of appetite, great heat, a dull
fierce, red or watery eye, indisposition to motion,
sleepiness, delirium, and madness."—

We believe that this fever is a secon
-dary consequence; The poison acting imme-
diately on the nerves to which it is applied—
its influence over the arterial system and o-
ther parts brings them all into diseased action—
and thus we have fever.

With respect to the time of the accession
of the disease after the bite is received, it is dif-

ficult to account for. Doctors Mase and Darwin suppose it to remain in the part injured until some cause excites it into action. This cannot be the case, for the desease has appeared after the wound has been washed and cleansed, and even after it has been cauterized.

This is a subject which is involved in the greatest obscurity: on this subject the severest philosophical scrutiny has amounted only to speculation and fanciful hypotheses. If I were to account for it in any way, it would be by supposing that some habits of body or states of the system were more able to resist the poison which was acting on the body at that time, and while it would act in some in the course of six or eight

days in others it might be resisted for years: and there are others again having no predisposition to be acted on or I may rather say irritability of the nervous system, (for on this I believe it acts) who would resist it altogether. This is confirmed by Dr Vaughan; and Van Swieten long ago remarked, "that the virus produced different effects upon different temperaments or constitutions" thus favouring the Idea of the predisposition of the system being necessary to the production of the disease -

On the method of preventing this terrible disease, and on the treatment of it after it is formed much has been said and written; and no disease has afforded more contrariety of opinion than this:

While some have trusted altogether to evacuants and have brought forward cases to attest the success of their practice; others have followed the opposite plan of treatment and have succeeded equally well, if we should judge from the cases brought forward on both sides; but this diversity of opinion on the treatment is owing to the different theories which different practitioners form of the disease. By many the disease is referred entirely to the sanguiferous system and regarded as a fever; Mongeot describes it as a continued fever; while Rush and many others as an inflammatory affection: There are as many on the other hand who refer the symptoms to the nervous system; of this opinion was Morgagni, Cullen, Perci-

-val and others. All these things show in how much obscurity the disease is involved and also show how easily we might be deceived in the treatment. One or the other of these parties must be wrong for they cannot both be right, when they are the reverse of each other; and for my own part, I think it most likely, that the most of the cases brought forwards in which this disease has been said to be cured, have either not been cases of Canine madness or forged by authors to strenghten some favourite theory.

But let these things be as they may if we judge from what has been written, and from the symptoms of the disease which are evidently nervous, such for instance "a yawning and stretch-

-ing, horripilatio, inaptitude to motion and great prostration of spirits" signs strongly indicative of lessened vigour of nervous energy: and from the resemblance of this desease to Tetanus & Hys-
-teria which we know to be nervous. I say if we judge from these things we must believe it to be nervous.

Although this appears to be evidently a nervous disease, it acts on the arterial system secondarily, and as we cannot give any stimulants which are strong enough to counteract the effects of the poison, we have to endeavour to find out some other way of treating the disease, different from that generally employed in affections of this kind, but of a lighter character; What these are I cannot tell they may be mineral or they may be vegitable;-

they may act chemically on the poison; or they may act in some other way; for it is immaterial how they act if we could find them to be specific, and this I think is the only hope we have of curing the disease.

This may appear strange but it was the same with Syphilis before Mercury was found to be a cure and the person afflicted with it was as sure of dying. But there have been so many medicines said to be specific and the public have been deceived so often, that no one seems inclined to search that they may find them. As the stimulating and the depleting plans of treatment have both failed to cure the disease, we must hope for something of this kind.

Among the Specifics (or those medicines supposed to be specific in the prevention of Hydrophobia)

are mentioned the Cold Bath of Celsus, (which is not yet exploded) Dampier's powders, turpith mineral and a species of anagalis or chick weed; this last, one of the most inert and insignificant articles in the Materia Medica, has acquired celebrity so great, as to have gained the patronage of the Pennsylvania legislature, and trusted to by many who were threatened with the disease.

But these failings should not deter us from the pursuit of such remedies, especially when it appears to be our only hope of success in the cure of Hydrophobia.— —

A Dissertation
On
Absolute Virgin
Submitted to the
Right Rev. Bishop [illegible]
Professors and Regents of the
University of [illegible]
In the Degree of [illegible]
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A Dissertation
On
Febrile Origin
Submitted to the
Right Revd. Bishop Kemp, D.D. Provost
Professors and Regents of the
University of Maryland
For the Degree of Doctor of Physic
By
Edward Y. Goldsborough
Of Frederick City, Md.

1825

To

Doctor John Baltzell

Of Frederick City Maryland

My dear Sir

In attaching your name to this dissertation I conceive I do nothing more than what is justly due from every pupil to his preceptor, and in doing so there is recalled to my mind the anxious solicitude which you always manifested for my advancement in the Science; and also the kind and polite attention shown me by yourself and amiable lady, for which you will equally accept my most profound esteem and respect.

That you may live as heretofore useful in public, amiable in private life, and in the

most perfect enjoyment of that health, which you have been so instrumental in restoring to others, is the sincere wish of

Your ever grateful pupil

The Author

Introduction

The only certain method of arriving at truth in the investigation of any subject is to unfetter the mind of preconceived opinions derived from sources other than its own, and endeavour as near as possible to pursue the course of nature, first, in health, and lastly in her diseased state, by adopting this course, science, is much simplified and the prospect of success in the study of the Phenomena of diseases greatly augmented, the great fault in authors generally is, in the examination of matters of science they forget they are writing for minds of different capacities and thus run into speculations complex, abstruse and difficult in their comprehension

and throwing over them a veil not to be raised except by the hand of genius; In this dissertation I have with all possible care avoided obscurity and have endeavoured to elucidate as much as I could the object of my research although much yet remains to be said on the subject.

Observations

On Febrile Origin

The origin of febrile disease is unquestionably very various, and is often so obscured by incidental and collateral circumstances, as to render a correct discrimination of its source extremely difficult. But a line of distinction or demarcation may be justly drawn, as to whether the disease action is of general or local commencement. The universality of febrile action is such in its manifestation as to render it inconceivable that such a general extent and violence of disease could have at once arisen, and shown itself compatible with the continuance of life. A disease so general, and so sudden, would, it may be presumed,

involve the vital functions of the animal economy in such a state of embarrassment as would necessarily, and in fact, be destructive to existence. Deviations from the healthy state, of whatever nature or degree, are for the most part, slow in their approach, & gradual in their progress. Seasonable and ample warning is given of the appearance of diseases, by the disturbed sensations arising from the deranged actions and functions of the various parts of the system. The salutary actions of life are bound and linked together by the mystical ties of organic sympathies. The circumstance of one part being in a state of health is an efficient law in the animal economy for other parts to be

in a similar condition; and thus a reciprocity of vital and healthful influence subsists between both the contiguous and remote parts of the animal frame. But for this innate connexion, there would be neither intercourse nor harmony in the various and dissimilar functions of animal life. The benificence of nature has happily provided, in the difference of structure of the animal frame, an opposing force to the easy transmition of disordered action. It is not every slight departure from health that either establishes or propagates itself. The part that may be its seat reacts on the morbid intrusion, and at least restrains its threatened mischief if it should not entirely arrest its action.

The disease on these occasions announces itself in such a way as to render the attack an object of seasonable attention. If the powers of the diseased part should be unequal to its own support, and should give way to the morbid circumstances by which it might have been attacked, the system, more or less generally, and with greater or less violence, will partake of the commotion, untill that which at first occupied, as it were, but a part, may be at length gradually extended over the whole frame. It is in this way it may be presumed, that all febrile diseases, which are commonly regarded as of a general nature, originate, and finally become diffused over the system, agreeably to the natural

laws of ~~associative~~ or sympathetic action.

It is evident that febrile affections, will in their, radical, as well as external, character, be coincidentally modified by the properties of the agents by which they are produced, It is also equally evident that constitution, habit, climate, and other physical and moral circumstances, will exert their respective and peculiar influence in producing the description of fever that might exist; The external character of fever may be almost infinitely diversified by various causes; but the intrinsic nature of the febrile state admits of the important practical generalization, that all the forms of that disease are of a local origin, and are never, in their onset, commensurate with the whole system.

The doctrine of fever is much simplified by the view of its fundamental nature; and cannot fail of leading us to the prominent point of investigation, what particular part might have been the seat of the disease that has been sympathetically extended so as to involve the system at large and assume the form of a general febrile affection.

The true nature of fever will be much elucidated by looking to its probable source and dissemination, instead of embarrassing the attention with unmeaning calculation as to occult influences, and supinely watching the course of the general disturbance from which the extended mischief had arisen. The importance of the distinction here insisted on respecting the

to fevers, the product of marsh poison of a low character usually considered as typhoid, in which the attendant symptoms do not directly suggest the existence of visceral disease; or, at least, not in a degree sufficient to have given birth to the affection. Instead of a vital organ being suspected to be the source of such diseases, when any particular viscus is especially affected, it is held to have been incidental and secondary, rather than essential and original. When the commencement and progress of visceral disease is such as denote active inflammation, no doubt remains on the subject, and the treatment is solely directed to remedy the local affection. The arbitrary distinction which has been raised between Inflammatory and Febrile diseases has been

productive of much mischief: they never differ but in the Majors & Minors: They are radically the same, and to dispute the identity of principle from whence their different forms proceed, would be to multiply words without distinguishing things. It does not at all follow, that, because a vital organ is not agitated with the more violent pains of inflammatory action, that it should not still be disordered by a state of excitement that may be subversive of its healthy function, from whence may arise morbid sympathies, that may be distributed over the whole frame. The symptoms of this state may not be evidently inflamatory, but the suffering viscus has nevertheless to cope with congestive fullness and disordered action

of vessels, that constitute a very serious state of disease, and will require for its relief and cure, a watchful attention to its local nature, rather than an unavailing endeavour to alleviate the symptoms, without such due reference to the morbid source from whence they proceed.

Agreeably to the view which I have been taken of the febrile state of disease, it is clear that it is a morbid condition that implies a general affection of the system, resulting from some local derangement of the healthy condition of some part of the frame. The state of fever, therefore, although of a secondary nature, implies a condition of disease always serious from the magnitude of its extent, and as presenting a degree of danger proportioned to

the vital importance of the part from which it derives its origin.

The Brain is the grand source of sensation; its healthful state cannot be disordered without in some measure, distempering the sensibility and associately disturbing the various functions of the whole frame. It is not uncommon for the brain to be oppressed by vascular fullness, in a degree not only to disorder its healthy sensation, but also to draw into sympathy with it the hart, stomach, intestines, lungs, liver, kidnies, and other parts, inducing the full form and character of febrile disease.

This affection may run on to an indefinite, at least, untill either destructive exhaustion, disorganization, effusion, or extravasation: or

the energies of the system may ultimately restore the healthy condition of the brain, when the sympathetic part of the malady would subside, and terminate in health. The sensative nature of the brain, and the various and complicated functions which it has to perform in the animal economy, render it peculiarly susceptible of beeming affected by slight causes of disease, occurrences that would be harmless in any other viscera, might be seriously injurious to the brain. The affection may not, indeed, be inflamatory; the morbid action may not go to that extent; yet it deranges the healthy function, and thereby disturbs the whole system sufficiently to induce the ordinary appearance of febile

disease. The leading inquiry in all febrile diseases should be, to ascertain what vital organ is most affected; and the history of the case should be sufficiently, to determine whether the diseased organ was primarily or secondarily affected. The danger of fever is generally to be estimated by the importance of the vital organ in which it may have originated. When it occurs in the brain, the hazard is most formidable; the heart & stomach are also organs of fearful disease, The lungs, liver, kidneys &c. are attended with proportionate risk and uncertainty. If fevers of every kind are radically the same or similar in being of local origin, it is clear that the indication of cure will partake

of that radical resemblance. From the expire
action emanating from inflamatory excitement,
and occuring in either visceral, muscular,
membranous, ligamentous, or any other kind
of structure, it becomes equally necessary that
the burthen of disease should be removed
from the affected part, owing that on its
cessation depends the subsiding of the general
affection.
Vascular depletion, and intestinal evacu
ation, to an extent that would be likely
to disembarrass the affected parts, will be
required; and although a tardy convalescence
may be expedited by tonic & stimulant
treatment, yet, pending febrile affection,
it is probable that the local cause of the

general affection still exists, and that, untill it be effectually relieved, the feverish state will not be overcome. As long as the local origin of the disease exists, its extension, of course, will remain, and during that time, stimulating agents must add to the disease action, and tend to incur either destructive exhaustion, or irretrievable disorganization. The abstraction of morbid stimuli is the grand object to be pursued in the cure of all diseases dependent on either vitiated, inordinate, or excessive action. These morbid stimuli are commonly excessive arterial action, — undue vascular distention, unequal distribution of the circulating fluids, irregular and vitiated secretions, inactive bowels, thirst,

deficient perspiration, intemperate heat, mental anxiety &c. These should be either moderated or wholly withheld, according to the exigencies of the case, when the order and calmness of the healthy action would, most likely be resumed and established. An increased action of the heart and arteries, with deranged secretions, denote an active source of disease, which must be overcome by means of abstraction, rather than of supply; or, to speak more medically by sedative rather than by stimulent influence, before the healthy state can be restablished. But, when the powers of life begin to flag, and the evidence of immoderate excitement, is wanting, it will be requisite to sustain the drooping state of vital energy in such a

way as may afford a chance of restoring it to the healthy equilibrium. pure air, adequate warmth, aliment, sleep, and mental tranquility, are the most congenial and salutary stimulents on these occasions; and when the local disorder has not mortally injured the affected part, recovery may be calculated on as the natural and reasonable result of such agency.

An Inaugural Dissertation
on
Cynanche Trachelis.

by
William T. Gantt.

1826

An approbationary thesis being necessary to obtain a degree in medicine, I with extreme diffidence enter upon the unpleasant task of preparing for your inspection a short dissertation on some subject connected with the science which has for a long time past exclusively occupied my attention. Conscious as I am of my inability to do justice to the disease which I am about to select as the subject of my thesis, and also aware that my limited knowledge of a science, to master which must require a lifetime, will not admit of any thing new or original; indeed an attempt to do so would only prove a vain and fruitless undertaking, I sincerely hope that every allowance will be made by this Honorable Faculty for the unfinished state in which I shall present it. Circumstances entirely unforeseen and beyond the reach of my influence, have prevented my devoting even the short time allotted to me since my examination to the preparation of my thesis, having previously chosen a subject on which I should necessarily

ily have to say more than my time would permit me, I have been obliged to abandon it, and select another far less complicated and easier treated on. It cannot be expected by the Faculty of this Institution, who will revise this dissertation, that I can at so early a career of my profession as I have above said, offer any thing new or original on a subject after so many men of talents and experience have spoken off previous to myself. Cynanche Trachealis or Croup is the disease which I have chosen as the subject of my thesis I will therefore content myself merely by describing the nature, symptoms, causes, and treatment. The Croup is an inflamation of the glottis, Larynx, or upper part of the Trachea, it is known by a peculiar ringing sound of the voice, by difficult respiration, straightening about the Larynx, and by a pyrexia attending it. This disease although highly inflamatory, does not run the same course as other inflamatory affections generally do, owing in some degree to the parts affected

at particularly from the high, and violent
degree of inflamation producing suffocation
from a morbid increased secretion of the
mucous membrane, and exhalent vessels lining
these parts, thereby preventing the terminat
ions common to other inflamatory diseases,
except that of resolution. When this disease
ends fatally, it is by a stopping up of the
trachea, producing suffocation. The causes
of this disease seems to be the same as those
which produce other inflamatory affection
in different parts of the body, sudden vicis
itudes of the weather, sudden transitions
from heat to cold, lying on the damp ground,
&c. are the principal causes of this disease.
Both adults & Children are subject to this
disease, but the latter much more so than
the former, and why inflamatory action in
Children is so frequently located in these parts
is to be attributed to the exquisite and peculiar
sensibility of those parts in them and the constan

disposition to an increased secretion, thereby rendering them more susceptible of a disease action. From the delicate structure of these parts in the animal oeconomy, it will appear that an inflamation affecting them will be attended with much danger. Accordingly we find the disease to be characterized by the most formidable and alarming symptoms, tending rapidly in most instances to a fatal issue, thereby demanding prompt and early means for the relief of those who may be affected with it preventing the poor sufferers from falling victims to this most formidable disease. This disease although principally confined to children seldom attacks them until after they are weaned, and after that period, the younger they are, the more susceptible they are to it. The symptoms of this disease, as I have mentioned above, are the following, a hoarseness, a shrillness and ringing sound of the voice, both in speaking and coughing, as if the passage of the air was contracted, great difficulty of breathing and swallowing. These symptoms become more violent from the inc

action of the parts affected, the mucous glands and exhalents, laboring under an increased action and sensibility which being farther excited by a preternatural and morbid secretion, is consequently, as in all other cases of unusual irritation, excited to spasm, which is farther increased by the mucous being inspissated by the heat of the part, and the current of air constantly passing over it, thereby producing that preternatural membrane so constantly found in this disease, from which the capacity of the trachea is exposed and co-opperating with the spasm in producing that extreme difficulty of respiration, which is so characteristic of the disease. The symptoms that precede a more violent attack of this disease are, drowsiness, inaction, restlessness, &c. the eyes are somewhat suffused and heavy, there is some cough and a hoarse voice, which is soon succeeded by a symptomatick fever, a peculiar wheezing sonorous inspiration, a stridulous voice in cough

ng and speaking. As the disease advances, the tonsils, uvula and fauces become inflamed, the face is flushed, and there is much restlessness, with extreme difficulty of breathing, the pulse is generally full, hard and frequent. From the causes, symptoms, and nature of this disease, the two principal indications of cure, must be first to moderate the increased action of the general system, and thereby lessening the determination of blood to the part affected, the first indication will be most effectually answered by the lancet, the second by vomiting, warm bath, blistering &c. and the proper application of these remedies I will now endeavor to point out.

When called to a patient laboring under this disease, the first remedy we should use ought to be an emetic, preceded by a large quantity of blood, abstracted either from the arm, jugular vein, temporal artery or wherever we can most conveniently get it, as we frequently

meet with difficulty in bleeding young children, let us not forget to regulate the quantity drawn to age and strength of the patient, and the violence of the disease, blistering is another valuable remedy and should not be forgotten, when used it should be applied to throat, our purgatives should consist of calomel in large doses repeated at short intervals until it operates on the bowels, after which it may be repeated in small doses throughout the disease. As we meet with difficulty in puking our patients, the emetic medicine should be of the most active kind, such as tartar and corrosive sublimate &c. As the stomach in this disease is very insensible, we must use such medicines as are most capable of making an impression on it, to assist our emetics, we must bear in mind the warm bath, say 96° of Far. it will also be proper to administer expectorants and diaphoretics. Senaga Polygala is one of our best remedies of this kind, and should not

be forgotten, Inhalations such as the steam of warm water impregnated with some acid is sometimes productive of great benefit, by promoting expectoration and thereby relieving the difficulty of breathing. Thus have I given a short sketch of the treatment frequently found necessary in removing this disease, but it is nevertheless not unfrequently the case, that it is so rapid & violent in its progress as to baffle all our attempts for relief, when we meet with cases of so violent a nature as this we may use the remedies which have been mentioned to the greatest extent. Tracheotomy has been advised, but whether to any advantage, I think not.

William. T. Hanff

An

Inaugural Dissertation

on

Hepatitis

Submitted to the examination

of the

Provost, Trustees, and Medical Faculty

of the

University of Maryland

For the Degree of Doctor of Medicine

By

Walter S. Turpin

of

Maryland

1831

There ~~are~~ is no disease to which the human body is subjected, which in former and enlightened ages so much eluded the indefatigable investigation of the speculative physician than the one under consideration; but happily for the science of Medicine and for suffering humanity, many eminent Medical phylosophers both in Europe and in this country have favoured the profession with invaluable treatises on this subject, which have materially tended to the elucidation of the ~~subject~~ disease.

The disease which is the subject of the present essay, must in all probability have been coeval with the most antiquated, which attacks animal frame.

On looking into the records of medicine, we find it described at that remote period, when the immortal Hippocrates the great father and founder of physick lived, and since his day it has been the theme of investigation by most of the Medical writers of his nation

but a more satisfactory elucidation of its pathology was reserved for the physicians and practical writers of our own country: who being residents of miasmatic and variable climates, to which it is peculiar, or incidental, has consequently elicited many able dissertations, which have materially contributed, to dispell the obscurity in which its pathology was formerly shrouded, and we have accordingly been furnished with many useful facts relative to this distressing, and too often fatal malady, together with an accurate description of its various attending phenomina. In its explanation the illustrious Rush has been as equally successfull in exercising his superior judgement, as on all other important subjects requiring medical investigation.

Hepatitis is an inflamation of the parenchymatous substance ~~of the~~ and peritoneal covering of the liver, it is a disease common to warm climates, and most frequently occurs, in the summer and autumn in the United states, when intermitting remitting and yellow fever and dysentery usually prevail.

It is the opinion of many physicians that men are more liable to this disease than women: are adults rather than those below the age of puberty.

Dr Gindlestone remarks that adults are invariable the the subjects of its attack, and of those the sanguine temperament rather than the melancholic.
This disease like all the other phlegmasia exists under the acute and chronic varieties, both of which are produced by the same remote and exciting causes, and differing from each other only in the grade of action, the chronic as frequently preceding as succeeding the acute stage; this is not only manifest in inflammations of the liver, but of other organs of the body, for a neglect of proper remedies, or an accession of new stimuli in the one instance may induce the acute stage, while in the latter, if the lancet be sheathed too early and other antiphlogistic means are not properly and sedulously adhered to, or are too early abandoned for fear of inducing debility; we do injustice to our patients fall short of discharging our duties as physicians, and entails on those entrusted to our care, that long train of morbid phenomena, which are the invariable accompaniments of chronic inflammation of the important viscus of which we are now speaking

Acute Hepatitis = Symptoms = This variety compared with the chronic species is rare. It is usually ushered in by a chill, succeeded by ~~a ch~~ reaction, the pulse being quick and small; the reaction is in the ratio of the intensity and duration of the cold stage, the heat of the body is increased, the pulse now becomes more quick, frequent and tense, sometimes full, hard, and strong, the mouth and fauces become dry, the tongue is covered with a white and sometimes yellowish furr; there is acute pain in the right hypochondrium, extending often to the Epigastric region, and sometimes to the left hypochondriac, which is generally aggravated by a deep inspiration; the pain about either clavicle or shoulder, with a difficulty of lying on the side opposite to the one affected, are extremely fallacious diagnostics, and are by no means invariable or pathognomonic symptoms, for in some very violent inflammations of the liver, there is no pain in the shoulder, and the easiest posture is not the back; the countenance during the stage of reaction is flushed, the eyes red and suffused,

but a few days after the attack of the disease a sallow or peculiar pale appearance commonly supervenes. Sometimes the least degree of pressure under the ~~ribs~~ margin of the ribs will produce the most exquisite pain, while in others the seat of the pain and also the enlargement will be prominently manifest about the scrobiculis cordis; the patient complains of violent and rending pain in the head. Jaundice is occasionally a concomitant of Hepatitis, but it is not necessarily so, as we often have inflamation of the liver, without any symptoms of Icterus. Dr Johson remarks in his excellent treatise on diseases of the liver, that Jaundice is more likely to occur when the concave surface of the viscus is affected; assigning as a reason for this, that as the gall duct is seated on this surface it becomes inflamed, and consequently thickened which obstructs the free flow of bile into the duodenum. We have also a torpid condition of the alimentary canal, but this state of things is sometimes reversed, and we have a profuse bilious diarrhea, which is very intractable.

an unproductive cough attend. Singultus, with a deep saffron aspect of the urine; an acid and dry state of the skin also attend this disease; generally speaking we have nausea and vomiting —

Dr Johnson also remarks that a pretty constant attendant on Hepatitis, both acute and chronic, is a heat or scalding in discharging the contents of the bladder, which he accounts for by the passage of bile along the urinary canal.

Terminations of Hepatitis. "The most desireable and frequent termination of this disease is resolution, a termination which we have a right to look for under a proper a vigorous and scientifice mode of treatment, but in tropical climates, if not promptly arrested by vigorous depletion or its terminations are the most "lamentably conspicuous in the black catalogue of disease". as an illustration of the preceding observation we have only to refer the reader to those works that are devoted to diseases of the liver as they occur in tropical climates. Suppuration supervenes, which is indicated, by an alleviation of the pains, and what remains is of the throbbing kind, there is a sense of weight in the part, rigors, Hectics, and an irregular

and dysenteric state of the alimentary canal. When the tumour is in the vicinity of the diaphragm the lungs become irritated, coughing is induced, and pus expectorated. This is an inauspicious occurrence, but the patient may recover; If the matter be discharged into the stomach, gastric irritation is extremely severe and we are sorry to affirm that death is almost invariably the result. or if it be discharged into the cavity of the peritoneum death soon ensues. If it be discharged into the intestines, we may generally prognosticate the felicitous termination of the case, if there be no other symptom to counterindicate the prognosis. When the tumour points externally it is recommended to be promptly opened, otherwise the constitution will materially suffer, before the pus can be discharged by the spontaneous efforts of Nature. It is also said that pus may be discharged through the gall duct, when it does so, no great inconvenience will occur.

varieties = Beside the acute and chronic variety of hepatitis we have three others.
1st Dyspeptic Phthisis. this variety generally occurs in a scrofulous diathesis, in which the lungs and liver

are so implicated, that it is difficult to say which has received the severest injury.

2d Hepatitis from calculi in the liver.

3d Hepatitis from schirrous, "this variety results from long continued inflamitory action, the liver becomes indurated and no red blood circulates in it, being supported exclusively by the serum, it also takes place when the action of the heart is not sufficient to produce suppuration" the cure of the three last varieties, has as yet eluded the indefatigable researches of practitioners; we regret to state that their fatality is almost ~~certain~~ invariable.

Diagnosis — On the first appearance of this disease it does not appear to be very important to distinguish it from the inflamation of contiguous organs, as the principal indication in all of them is to lessen arterial action. From thoracic inflamation we may usually distinguish it, by the pain in hepatitis, not being aggravated by a gradual inspiration, and also if we make pressure under the floating ribs, in hepatitis the pain is sensibly augmented. if we are still dubious as to the real character of the disease, the exhibition of a cathartic in hepatitis, will usually produce vitiated secretions, which will generally be sufficient to render the diagnostic perfectly plain.

It has been mistaken for gastritis, but it may be distinguished from this disease by the great gastric irritability and the pulse which characterises it.
From Rheumatism of the intercostal muscles by the absence of bilious discharges in the latter on the administration of a cathartic.

From calculi in the Gall ducts by the absence of high arterial action in the latter.

Prognosis – Great caution is to be observed in offering a prognosis of this disease, strict attention to concurring circumstances, and experience are required, the appearances are often fallacious, and by a hasty opinion, a physician may involve his future reputation; but if the appropriate remedies have been judiciously and sufficiently used, the most favourable conclusions may be drawn; the following circumstances may lead to a most favourable ~~conclusion~~ prognosis.
1st the supervention of a bilious diarrhea.
2d the return of some periodical evacuation, as an accustomed hemorrhoidal discharge, or evacuation from the uterine vessels.
3d Epistaxis, but a greatable to the ancient writers from the right nostril alone, because it was the opinion at that day, that inflammatory diseases were

only resolved by the occurance of hemorrhages from the affected side; thus they concluded that hemorrhage from the right nostril indicated a favourable issue of hepatitis, and from the left of splenitis; this idle opinion is abandoned at the present day.
4th Profuse diaphoresis indicates a favourable termination to the disease.
5th Copious discharges of turbid Urine. When it is ascertained that suppuration has taken place, our prognosis can seldom be favourable, but still with this unfavourable symptom, as has been observed before the case may not be fatal.

Sequala – when this disease is improperly healed the sequalæ are truly lamentable; Hydrothorax, Ascites, and all the other varieties of dropsy, which sooner or later must terminate the sufferer existence, if a proper mode of treatment is not properly adopted: Splenitis. In females living in Miasmatic districts, it produces frequent and regular attacks of Menorrhagia, the portal circle becomes congested, and with difficulty the blood is transmitted to the right side of the heart, in consequence of which it is determined with great violence to the Uterus, producing all those dreadfull consequences that result from profuse hemorrhage, such as emaciation, debility, and ultimately death, this state of things

cured only by salivation. Inflamation of the liver is said to be an exciting cause of apoplexy, particularly when it has been brought on by excessive eating and drinking, in these cases the organ becomes enlarged and indurated, consequently makes pressure on the Aorta & arrests the free circulation in the lower extremities, and in this manner becomes the exciting cause of that dangerous malady.

Predisposing Causes = Tho' these causes are numerous, the following are the most common,

1st A high range of Atmospheric temperature, the operation of this cause on the liver appears to be inexplicable, it may act perhaps as a strong stimuli to this organ producing indirect debility, and consequent determination of blood to it on the application of the exciting cause.

2d Marsh miasma, this cause seems to have an elective attraction for the liver, but acts primarily on the nervous system.

3d An inordinate indulgence in the luxurious viands of the table, and the frequent ingurgitation of inebriating liquors, particularly ardent spirits, are ranked foremost as the predisposing cause of this disease.

4th The depressing passions,

5th Violent and long continued exercise.

6th A plethoric habit.

7th The male sex, and particularly those of a choleric temperament. These and innumerable other causes acting on the system, are mentioned by Authors as predisposing to this disease.

Exciting Causes = When the body is labouring under any of the predisposing causes, mentioned in the preceding page and then exposed to cold either local or general it will be found in a great majority of cases to produce this disease. Dr Johnson in his treatise on diseases of the liver, claims drinking of ardent spirits as an exciting cause, and we think when a person has been long exposed to the influence of any of the predisposing causes, (as for instance, M. Effluvium,) a debauch may lead to an bea attack of hepatitis.

Treatment = In entering upon this important part of our subject, it will be necessary to speak in the 1st place of those remedies that are proper to remove the disease after it has once occured, and 2dly a few words on the prophylaxis, or the method to be pursued in obviating its recurrence.

1st As this disease in some instances attacks with such violence, as to endanger life in a short time, the remedies should be appropriated to the exigency of the case, therefore when there is great morbid excitement the lancet should be unsheathed and energetically used

This manner of lessening arterial action, is by far preferable to all others, in being less circuitous in its operation, which is an important consideration, as it prevents the rapid tendency of this disease to suppuration or gangrene, which is sometimes so rapid as to resist the most antiphlogistic practice, bloodletting must therefore be copious and frequently repeated; the rule by which we are to be governed in this remedy is that as long as there is any inflamitory action we can bleed freely. But venesection of itself is not competent to the completion of the cure, for the liver being in a morbid condition, necessarily secretes an inordinate quantity of vitiated billiary matter, which it is indispensibly important to evacuate as fast as formed; to answer this indication, the Neutral Salts and other Hydrogogues are the most eligible. Calomel is not only useless, but absolutely injurious in the acute variety of this disorder. The action of the Metal ferments inflamation, without producing salivation, and thus renders more bleeding and purging necessary; but when the disease shall have run down into the chronic variety, Mercury is indispensible to the cure. When by these means the inflamation is materially abated, we should endeavour to promote diaphoresis by appropriate remedies, to answer this indication Nitras Potassa may be used with advantage if there is

not much nausea. Acidulous drinks and diluents are decidedly usefull. The antiphlogistic plan should be strictly enforced, the diet should be barely sufficient to support life. Emollient enemata are most decidedly usefull, as auxillearies in this disease.

Blisters. these remedies are only applicable at a particular period of the disease, and this stage has been aptly called the blistering point; at which time they can only prove serviceable; for if we apply blisters when the system is labouring under high arterial excitement, mortification is very apt to be the consequence.

In accordance with the arrangement with which we set out we will make a few succinct observations, in relation to the prophylaxis. For this purpose the remote and exciting causes must be guarded against. the diet may be nutritious but simple, ardent spirits must be avoided under any form, lemonade, Cider, and Malt liquors, may occasionally be indulged in. The patient should carefully guard against the vicissitudes of weather, and sedulously accomidate his dress to its transitions. Exposure to the rays of the sun and fatigue should be guarded against, moderate exercise however may be indulged in. The bowels should be kept regular. Constipation obviated by the occasional use of a bland cathartic.

when on a recurrence of any of the symptoms the remedies before mentioned should be promptly resorted to.

An Essay,

on Hepatitis

Submitted to the

Right Revd. Bishop Kemp, D.D. Provost

Professors, and Regents of the

University of Maryland,

For the degree of Doctor of Physic

By,

George H. West

of Frederick County Md.

1825

To

Doctor William Hilleary,

Of Frederick County, Maryland.

Dear Sir,

In prefixing your name to this essay, I have on-ly fulfilled a duty which every pupil owes to his preceptor; but should accuse myself of ingratitude, were I to pass an obligation of a superior nature unnoticed, as it was from your friendly councils, I first learned to appreciate the superiority of medical knowledge. But before conclu-ding, permit me to hope that you may live, as heretofore, useful in public, amiable in private life, and in a more perfect enjoyment of that health, which you have been so instrumental in restoring to others, is the sincere wish of,

Your friend, and pupil,

George W. West

An Essay,
On Hepatitis.

When we contemplate the admirable structure and nicely balanced arrangement of the human body, its delicate form, the number and exquisite fineness of its movements, it cannot be a matter of surprise, that it should so often become the subject of disease, especially when we reflect on the numerous ills to which it is daily and hourly exposed, as well from external causes, as from its own organization, and the operations of its own powers. The general system comprehends within itself many subordinate systems; the proper functions of which must all harmonize, to form perfect health; and the constitution of our frame is such, that no one part of importance can be materially disordered without reacting on other parts, which

in their turn, likewise give rise to a series of altered action; and thus, the whole system is finally drawn into morbid consent.

My object in this essay, is only to notice the acute form of hepatitis; which is according to Dr. Cullen's Nosology, placed under, the order Phlegmasia, and Class Pyrexia. But before entering into the Pathology of the disease, and in order to explain more fully its nature; I will give a general view of the situation and structure of the liver. The immense size of the liver, the number and magnitude of the parts which compose its complicated vascular machinery, its enormous size in the early stage of foetal existence, so well worthy remark, and its especial connection with the circulating organs at that period, all lead us to conclude that it answers some other purpose in the animal

economy beside the secretion of bile.

The organization of the liver is peculiar; it is in some degree, firmer and drier than any of the viscera, and differs from every other organ of the body, in having the office of secretion carried on by a vein, in the place of an artery, which performs the double office of secretion and nutrition in every other gland, except the liver.

The liver in its most healthy state, is of a reddish brown colour, is composed of a tolerably firm and close substance, consisting of a closely united congeries of different vessels, and is of considerable weight, especially when increased by the accumulation of disease. It occupies the right hypochondrium, & upper part of the abdomen, extending a little towards the left side, more particularly when increased in substance by the encroachment of disease, and is

situated immediately under the vaulted cavity of the dia-phragm, or muscle which the chest and Abdomen.

Its principal parts are, its ligaments, its surfaces, its margins or edges, its tubercles, its lobes, and its ves-sels. By its ligaments it is attached to the different parts surrounding; and it is from the influence of these ligaments, when affected by hepatic diseases, the irritation, pain, and uneasiness of different parts of the chest and abdomen arise. Its surfaces are, a superior one smooth and convex, which is applied to the diaphragm; and an inferior one, unequal and concave, which looks towards the abdominal viscera. Its margins or edges are, a superior & posterior one obtuse; and an anterior and infe-rior one, acute: and it is considered by experi-enced men, of particular importance, in judging

of the state of the liver, to know with accuracy the feel of this anterior and inferior margin or edge in its natural and healthy condition. Its lobes are a right and left one; and a lobulus spigelii, which lies between the two former. Its vessels are, the vena portarum, the hepatic artery, ~~and~~ hepatic vein, and the biliary ducts. Its nerves are small in comparison to the size of the organ; consequently considerable derangements, may take place without being very sensibly felt by the patient. This gland may very justly be considered as the grand reservoir, which receives into its circu-lation most of the returning blood of the body, charged with the several impurities it has met with in its progress, which are again removed by its secreting office in the conversion of the properties into that fluid called the bile.

The gall-bladder is situated, and attached to the lower surface of the right lobe of the liver, and partly buried in its sinus. It is generally of a size sufficient to contain an ounce and an half of bile.

The use of the gall-bladder is supposed to be a mere receptacle for reserving a sufficient store of this fluid for the due change to be performed upon the food, the quantity of bile evacuated, is proportion-ed to the food, which is passing the duodenum.

Whether we should conceive that this is a necessa-ry consequence of the retention of bile in the gall-bladder, or a wise provision of nature, I am unable to say; but it appears, that the longer the bile is re-tained, or the longer the fast and deficiency of food in the duodenum, the more acid and inspis-sated is the bile, and the greater also in quantity.

This inspissation is supposed to take place in consequence of the activity of the lymphatics, which ramifying on the coats of the gall-bladder absorb the thinner part of the bile.

Causes.

Besides the causes, which produce other inflam-mations, such as the application of cold, external injuries from contusions, blows, &c. this disease may be occasioned by certain passions of the mind, by violent exercise, by intense summer-heats, by long continued intermittents, and remittents fevers, by an intemperate use of vinous, and spirituous liq-uors, but more particularly the latter, and by various solid concretions in the substance of the liver. In warm climates, this viscus is more apt to be affected with inflammation than any

other part of the body, probably from the increased secretion of bile which takes place, when the blood is thrown on the internal parts by an exposure to cold.

Symptoms.

Generally commences with rigors or shivrings, followed by a pungent pain of the right side, which is also felt under the margin of the ribs, shooting more particularly in the direction of the back, and to the shoulder blade; cough, oppression in the respiration, nausea, sickness, often with a vomiting of apparently bilious matter, accompanied with considerable fever; great watchfulness, and occasional delirium; extreme thirst, the tongue generally covered with a white crust, extending also to the mouth and fauces; dejection of spirits; sometimes hiccup;

loss of appetite, and difficulty of lying, except on the affected side; yet instances now and then occur, where the patient is unable to lie on either side; pressure also on the region of the liver, when there is usually tension, induces considerable increase of pain and tendency to cough, the cough is more generally dry than moist; the bowels are frequently irregular, though oftener constipated than otherwise; the urine secreted is small in quantity and high coloured, and often tinged with bile; the pulse is hard and strong sometimes exceeding one hundred and twenty in the minute, and at times intermitting; it is attended occasionally with a jaundiced skin, arising from the bile being obstructed in its passage to the common duct, by reason of the pressure of the inflamed liver on the Ductus Bili-

-ani; while the continuance of inflammation occasion-ally induces, as a resulting consequence, adhesions of the organ to the contiguous parts, or considerable enlargement of particular portions, such as the lobes, where suppuration ensues, or sometimes scirr-hosity. But in every inflammation of the liver, it may be observed, that the symtoms, are more or less acute, according to the degree of sensibility in the part affected. When the membranous cov-ering of its superior convex part, or the ligam-ents which unite it to the diaphragm, be inflam-ed; the pain, fever, and difficulty of breathing are much more violent, than when its interior pulpy substance, or its convex inferior part, is affected; which being more sparingly supplied with nerves, are less susceptible to the action of the

morbid cause. When the inflammation acts with extreme violence, the increased secretion of bile is sometimes thrown into the first, occasioning considerable derangement in the state of the evacuations. Generally the secretion of bile is profuse, though its passage into the duodenum is oftentimes impeded: so that jaundice is no uncommon occurrence in this disease.

Diagnosis.

We may readily distinguish hepatitis from pneumonia by the pain in the former extending into the shoulder; by the sallowness of the countenance; by the cough being unaccompanied by expectoration; and by the less degree of dyspnoea. The heat and pain not being increased upon taking any thing into the stomach, its being able to retain whatever liquids or medicines an

ceived into it, without the immediate rejection of them, and the less prostration of strength, will distin-guish it from gastritis. Hepatitis may be discerned from spasm of the gall ducts, by there being no nau-sea, by the pain being permanent, by the pulse being more frequent, and by the patient always preferring to keep the body in a straight, quies-cent posture; whereas the greatest ease, when there is spasm of the gall-ducts, is obtained by ben-ding the body forwards on the knees.

Prognosis.

In most diseases it appears to be an arduous task to lay down decided and unequivocal prog-nostic symptoms; as patients have recovered un-der every discouraging circumstance, whilst others have died where the most favourable

prognostics were present. The most favourable signs, are a general abatement of the pyrexial symptoms; an improvement in the complexion, the strength not much reduced by the remedies, return of the appetite, and an increase of the bulk of the body.

Intensity of pain and fever, obstinate constipation, severe rigors succeeded by flushings and hectic fever, denote suppuration. Continual hiccups, cold extremities, and sinking of the pulse, indicate great danger.

Treatment.

In laying down the treatment of any disease, general principles alone can be communicated; in every case certain variations occur, which require judgment, experience, and observation in their application; an exact line of proceeding cannot then

-fore be founded, adapted to each constitution and habit; hence the discretion of every practitioner must have much to work on.

In the healment of this disease, the general means of obviating inflammation are to be rigidly, enforced, by strictly employing the antiphlogistic regimen. We should view the lancet as our sheet anchor, not to be influenced by the quantity of blood drawn; but by the effect which it has on the system; during the first stage all stimulating articles should be avoided; the bowels should be kept soluble by means of the neutral salts, they will also carry off the bilious matter as fast as it accumulates. After the action of the system is in a great measure subdued, and there still remains some uneasiness in the side, blisters may

be employed with advantage. Calomel may be used in small doses in this stage of the disease. Sometimes a troublesome diarrhoea attends the second stage of the disease; which is supposed to be owing to the same species of inflammation attacking the intestines, to obviate which, the most approved practice is that recommended by Dr. Potter viz. Calomel combined with opium. Diaphoretics may be employed with some advantage after the use of the lancet; for this purpose, the Nitras Potassæ, combined with Tart. Antimony. when the stomach is not in an irritable condition. With regard to the use of emetics they should be altogether discarded.

Hepatitis like all other inflamations may terminate, by resolution, suppuration, or scirrhus, when suppuration takes place, the case is not

only more unmanageble, but generally proves fa-
-tal. This latter termination may be distinguished
by the subsidence of pain, and attended with ri-
-gors. When pus is formed, it may be emptied into
the cavity of the thorax, stomach, and sigmoid
flexion of the colon by adhesions. When evac-
-ated into the cavity of the abdomen, it generally
terminates fatally; the pus may be formed in the
substance of the liver, and pass off by the biliary
ducts into the intestines. The abscess sometimes
points externally, and the use of mild embrocations
are proper, and the pus should be evacuated by a small
incision.

To

Dr John B. Davidge

Professor of Anatomy

in the University of Maryland

Dear Sir

Dedications made up with professions of Gratitude and esteem, have such a formal appearance; that they are now considered things of course, but whilst I admit that the Idea is not without foundation, I must declare it is not consonant with my present feelings.

The opportunity thus afforded me, publickly to acknowledge the many obligations your attentions have laid me under, compensates for the disagreeable necessity, of submitting to the Faculty a very imperfect Essay.

Accept then my most sincere thanks; and permit me when I shall no longer be your pupil to call myself your friend.

Ethelbert Carmichael

1817

Bronchocele.

Before engaging in an account of the nature and treatment of the disease which forms the basis of the exercise I am called on to perform, it will be proper to pay some attention to the structure, together with the supposed functions of the parts concerned.

The Thyroid Gland, the peculiar seat of the disease known by the term prefixed to this Essay, is placed in front of the Trachea, and consists of two lobes apparently united into one body for some distance above the lower extremity.

Each lobe is directed upwards and backwards from the second cartilaginous ring of the Trachea rising over the Cricoid and a part of the Thyroid Cartilages, having the greater portion of the lobes applied to the Trachea and cartilages rather laterally than in front. It is of a reddish brown colour and constructed in a manner Glandular, but that there is not some intrinsic and essential difference from ordinary glandular structure, is a question which Anatomy has not settled and about which Physiologists are not agreed.

It is supposed by most Anatomists to be a gland, but by many to be a Gland peculiar in its organization and Economy

This body is abundantly supplied with Blood, receiving two very considerable arteries on either side; one from the Laryngeal branch of the external Carotid, and the other from the Thyroid branch of the Subclavian.

Having noticed its situation, structure and ins= = truments of support, I shall briefly advert to the functions which have been attributed to this organ by different writers.

Notwithstanding the large supply of blood the Thyroid Gland must receive from the numerous vessels which belong to it, a supply we should suppose much greater than is demanded for the mere purpose of nutrition, there is no evidence that it performs any particular office of secretion. Reasoning presumptively indeed we cannot well escape the conclusion, that such is probably the fact; that part of its Blood is disposed of by a particular secretory process, but however this inference may be sustained by general analogy, and although several anatomists have supposed they had discovered excretory ducts passing to the trachea, the Larynx, or tongue, it is now generally agreed that no such Channels are to be found.

Professor Wistar of Philadelphia observes in his anatomical work, that special instances have occurred in which by violent straining, air has been forced from

the Trachea into the Gland.

Among the first who entered the field of speculation on this obscure subject was our illustrious countryman Rush, by whose industry and acuteness many obstacles which long impeded the search of Medical Adventurers have been removed for their Path. Pursuing his contemplations with an ardent devotion to his Profession, and confidence in its resources, he conversed familiarly with the phenomena of nature, and collected from his excursions, deductions which if not always just, were generally ingenious. In his search into the laws of the animal Oeconomy he was led to the conclusion that the Spleen whose relation to the general system had never been ascertained was intended as a reservoir for any occasional excess of blood which might endanger the neighbouring viscera. This theory was afterwards extended to the Thyroid Gland. Professor Rush supposing that this organ held in relation to the head, the same recipient office which was performed by the Spleen for the viscera of the Abdomen; for both are supposed to be Glands — Are not fully explained by the Professor, as to enable us to contemplate them with that full conviction, which they appear to have produced on his

own mind; yet the opinions of so great a man are entitled to great deference; and we must not hastily conclude that every proposition is untrue which we do not immediately comprehend. I confess however that the size and structure of the Gland constitute objections to the theory of Dr Rush which perhaps are not easily obviated; and we may be compelled to admit that for once a vivacious imagination has been hurried into some forgetfulness of an apparently irreconcilable disproportion between the means and end.

I do not know that there are any other opinions on the Physiology of the Thyroid Gland worthy of particular attention, and I shall pass on to such an examination of the pathology of the disease peculiar to that organ as my imperfect knowledge of the subject will admit, a disease known by the term Goitre or more generally by Professional men termed

Bronchocele.

It has sometimes been a question whether this disease be the effect of Climate, of particular local circumstances, of certain habits of living, or of casualty. whichever be the fact the pathology or nature of the

disease must be determined by the causes or the natural tendency of the means to which its existence is owing. If it be owing to climate, it is by no means certain that we should be able to trace the particular conditions of the atmosphere on which it depended; If to local circumstances, there would be still some difficulty in fixing on the real agent: if the cause were palliating, or on the means most influential if many agents were combined. A particular or peculiar regimen as to food, or drink, if either or both constituted the occasion of this disease, would have as little liable to suspicion than the two former alledged causes, in proportion as they were less complex, and more susceptible of investigation; and if it were the result of casualty; by detecting, the instruments, we might arrive at a knowledge of the morbid phenomena with the utmost facility and precision.

Of all the above enumerated circumstances to which Bronchocele has been attributed, we can find no one which affords any plausible reason, why it should be disposed to, cause of the malady, with the exception of the last casualty? they are all indeed so obscure in their nature that no argument can well be

founded on their probable effects.

When we refer to climate as the cause of particular diseases we cannot be said to have advanced far in positive knowledge, for we speak a language which conveys no distinct Idea, as that of which we speak is unsusceptible of any satisfactory Analysis.

In like manner when we attribute a disease to habits of living; as diet, drink, occupation, &c. we employ terms equally vague and indefinite, without we can point out some peculiarity in those respects, fitted to produce the consequence to which we allude. Unhappily we are often reduced to the necessity of indulging those general supposition when we are discussing difficult questions in Pathology; and we can only lament an art so noble in its objects, should be thus destitute of any certain means of Illustration.

With regard to the many accidents which may be supposed to occasion Goitre by provoking inflammation in the Thyroid Gland; and thus creating a gradual increase of Growth, it seems enough to say that Bronchocele does not

resemble any species of Inflammation with which we are acquainted. Inflammation has uniformly a tending to some one of its terminations, it is either resolved by natural or artificial means; or goes on to Suppuration or Gangrene; it is always attended by some increase of heat; tensibility, and other signs of an inflamed state; While Bronchocele on the contrary consists in a slow and regular increase of volume in the part, without any natural tending to either of usual terminations of inflammation; and without any of the heat, tenderness, &c which perhaps are never wholly absent from any state of true inflammation.

Dr Leake is among those who have attributed the disease to climate and situation; As tumors of this species are very common in the low vallies of Scotland, he supposes they may be owing to long exposure in damp cold air. Others on the contrary that the occasion of Bronchocele might be remedied in the general use of snow water; by those who inhabited elevated or mountainous

situations.

Mr Prosser is inclined to rank it among dropsies, and founds his opinion, on some facts furnished by dissection; particularly the case reported by Dr Hunter in which there were found cysts containing a fluid. Dr Baillie countenances this opinion, for upon laying open the tumor after Death the same appearances were exhibited.

Treatment

Though I can hope to offer nothing either new or valuable concerning the treatment of this formidable malady; it is necessary before concluding this essay to speak of the measures which have been recommended for its cure. They may be properly divided into surgical and medical, as it has been much questioned whether Bronchocele be most fitly a subject for the Operator, or Physician.

It could scarcely be a point for controversy, whether or not this evil should be given over to the knife of the surgeon; nor it not for considerations attached to this particular case and but little applicable to tumors in any other part of the body. We readily admit that tumors of a permanent character should be subjected to extirpation, when there is little probability that they can be affected by Medical Measures; and there appears to be but one reason why Bronchocele should not fall under the same rule. The Ground of objection in this case however, is of all others the most important; nothing less indeed than a presumption resting both upon Analomy and experiment, that extirpation cannot be effected with security to the patient.

The Thyroid Gland is penetrated by so many bold vessels, qualified by their near connection to the Heart to bleed fearfully if divided, that its safe removal in its natural state must require great

confidence and address; but the difficulty must be incalculably increased, when it is so far enlarged in bulk as to constitute a disease calling for surgical interference. The hazard will then be augmented not only by the enlargement of its own vessels but by the nature of the parts to which its relations will have extended.

Mr Gooch has ventured upon the bold measure of extirpation in two or three cases of the disease; but the issue of those attempts can have no tendency to invite repetitions, and I believe it is now generally conceded that such tumors must be suffered to go on undisturbed or confided to a management chiefly or altogether Medical.

The plans of treatment to which Bronchocele has been subjected, by Physicians who have undertaken to arrest its progress, or reduce its bulk by Medicine, exhibit the same diversity which we find

in the experiments on all diseases reputed generally incurable. All the forms of Local Bloodletting, and issues, variously produced, were for a long time favourite remedies for the reduction of the tumor, gradually however cupping, scarifications, &c; were laid aside, while the issue was retained and frequently constitutes a part of the present mode of treatment. Repeated Blistering followed by stimulating applications, to the inflamed surface, so as to provoke free suppuration is even the most usual form of establishing a drain, from the part, and we are admonished to maintain a discharge in this way long and regularly. Writers speak of this method with some confidence, and although, I have never been a trial of blistering in Bronchocele the probability of advantage seems to be supported by the benefit resulting from long continued vesication in other tumors of an endolent nature.

Fractions, by various modes has been occasionally preferred to Blistering — with what effect we are left in

considerable doubt.

Dry rubbing, or more stimulating applications as camphorated mixtures, Aq. Amm. Acetat. &c &c, have been much used. Cold, long continued has been employed as a means of inducing permanently the state of the tumor; for this purpose Ice pounded and wrapped up in some convenient form, has been applied and renewed. Occasionally a temperature much lower as the evaporation of Ether &c.

All those local measures however are generally considered as secondary only to a regimen more strictly medical. The Mercurial preparations in various states together with the Burnt Sponge have for some time held the chief rank in the treatment of Bronchocele. The Mercury is either given as an alterative, taking care to avoid any very sensible impression on the mouth, or it is administered in large and full doses for a few and decided salivations.

The Sponge, is used in the form of a lozenge in connection with Mercury.

I cannot omit advising a trial of the acuta. as it has been beneficially employed by our professor of Surgery in a case which fell under his care in this city.

Right Reverend James Kemp. D.D. Provost
and to.
The Trustees and Faculty of Physic of the University of Maryland

For the Degree of Doctor of Medicine

On the Second day of April One thousand Eight hundred & thirty seven

By
Anthony Daly
Of Montgomery County and State of Maryland

1827

Gastritis

Preliminary to the more immediate object of this desultory treatise; it is necessary to advert to the function of the stomach, and its relative connections. There is perhaps, no other organ in the human system, that possesses a more exquisite degree of sensibility; nor endowed with a higher state of vitality than the stomach. Its sympathies are various, and minutely ramified: and the diseases that radiate from it, as from a common centre, are as numerous, as different in degree, and diversified in character and shade of intensity; as the causes from whence they spring. From their peculiarity the stomach has been styled, and with some degree of propriety, "the store house of disease"; for upon a healthy state of this organ, and a regular performance of its functions; depends the welfare of the whole animal economy. It is not only the fountain of nutrition but the channel through which, by medicinal means we combat diseases of the most inveterate character when situated upon the very verge of the system: I will give one instance of the extent of its remote sympathetic relations, How often is it observed that indulgence in a particular kind of food (as shellfish) for example, may soon after being eaten, produce upon the cutaneous surface an expression of disease which convences upon the slightest enquiry and inspection that the ingesta has been of an offensive and improper quality: But there is one disease which more immediately involves and concerns the stomach itself which nosologists call Gastritis or inflammation of the stomach and is either idiopathic or symptomatic. The term gastritis was formerly applied to denote any species of inflammation within the abdomen, no matter where situated whether of the liver, the spleen, kidneys, peritoneum &c. From what has been already said of the functions and relative connections of the stomach; it is unfortunate that it should undergo

inflammation to any considerable degree or suffer from disease in any form without the whole sentient system responding which will always be in proportion to the impression and force of the attack. The certain and natural consequence must be sudden prostration of the vital powers a degree of atony seldom or never observed in other diseases of an inflammatory character. The stomach suffers severely in all cases where inflammation of that organ has taken place of the acute or Phlegmonous description; and rarely or perhaps never, regains its former tone. In this respect it differs from several of the other abdominal & thoracic viscera the liver the spleen and the kidneys & the intestines and the lungs with their investing membranes may even the contents of the encephalon may be all severally attacked by inflammation and little or no impair of the general health follow or injurious sequelae remain. Gastritis though a formidable is not a very unmanageable disease, by judicious and energetic treatment, it may be divested of much of its danger. There is in the management of this disease no time for temporizing, the curative means must be prompt and efficient for it soon runs its career and terminates fatally if not checked. When the patient is robust and the constitution vigorous the antiphlogistic plan of treatment is to be early resorted to and pushed to its full extent. Copious and repeated venesection in the early stage of the attack has prevented the further march of inflammation and cut short the disease. But if the inflammation has been permitted to progress uncontrolled even for a short period without any effectual attempt to check it; a stage of the disease soon supervenes, when general bleeding would only increase the danger and hasten the death of the patient. Under such circumstances the proper indication is to abstract blood locally by the means usually resorted to, aided by mild, cooling & gentle purgatives, administered in the form of Enemata with the

warm bath; fomentations over the abdomen, and Vesicatories. When the disease is excited by any acrid poison or narcotic substance taken into the stomach either by mistake or design we must resort to the proper and known Chemical or other Antidotes; Emetics Diaphoresis Opiates &c. as the symptoms ~~and~~ ~~[illegible]~~ and Chemical Characters of the poison may indicate. The division of gastritis into the Phlegmonous and Erysipelatous by Cullen and followed by subsequent writers subserves no useful or practical purpose as the latter is generally an attendant upon other diseases as they approach a fatal crisis which a division was quite unnecessary as we are governed in the treatment not by the name of any disease but by the symptoms the quantity of diseased action and the state of the general system founded upon observation and the infallible test of experience. Other writers have refined upon the classification of Cullen and have changed his terms into the Adhesive and Erythematic species. The first of these is known by violent pain extreme degree of pain and suffering; the latter is attended with less pain less pain symptoms seldom violent ~~and~~ an efflorescence appears in the fauces the pulse generally low and quick.

No doubt ~~adhesions~~ during inflammation of the stomach adhesions are formed in some few cases, with the surrounding viscera, with the walls of the abdomen; and to which patients very often owe their lives. Mr Cruikshank in his Anatomy of the Lymphatic system mentions a case where the stomach adhered to the small lobe of the liver at its under aspect. ~~Had~~ ~~had~~ not these adhesions formed in this instance been anticipated by violent efforts to vomit; the contents of the stomach would have been prevented from escaping into the abdomen. (a thing which actually happened through an ulcerated orifice, and the life of the patient been saved.

The symptoms usually attending the Phlegmonous inflammation of the stomach are acute pain a sense of burning and heat in the epigastrium.

~~Epigastrium~~

Epigastrium vomiting which is increased upon taking food of any kind, the mildest fluids are rejected. the Countenance has a peculiar expression of anxiety and distress the pulse at the onset of the attack is small, hard and frequent; but soon becomes feeble quick and depressed. toward the termination of life, or in some cases with great debility and prostration of the vital powers, it is irregular and intermittent. The thirst is urgent and insatiable the bowels are costive. and a hiccup is sometimes a symptom but less constant than those enumerated There is no other inflammatory disease of the system in which there is such a rapid prostration of the vital energies, and denunciation of strength; the pain and anguish are commensurate and, to such a degree that syncope is no rare occurrence The pain though generally referred to the region of the stomach is not always confined to that situation patients will often complain of pain in other parts of the abdomen, from the spread of inflammation along the peritoneum or intestines. There is no remission of pain no interval of ease from their exquisite state of suffering There is no repose, sleep is entirely banished. The relief obtained by drinking any fluid is so transitory, that the mitigation obtained in this way, is more than counterbalanced by the distressful efforts ~~at emesis~~ to expel it by emesis. Nothing will remain on the stomach generally speaking; to this circumstance is owing that obstinate degree of constipation which in the greater number of cases prevails throughout the disease. The constant vomiting forms an insuperable obstacle to the exhibition of purgatives by the mouth.

It is impossible to mistake gastritis for any other inflammatory affection of the abdominal viscera. Enteritis is the only disease which nearly resembles it in similarity of the symptoms. still there is a rule marked diagnosis the constant vomiting and feeble depressed pulse of gastritis are always wanting in Enteritis. besides the pain ~~of~~ instead of being seated in the Epigastrium is always referred to the umbilicus Neither can spasmodic or flatulent pains of the stomach

be mistaken for inflammation of the organs. There is no vomiting the pain is less constant. the strength is not much depressed and the pulse little altered. Pressure upon the stomach affords relief rather than pain. A degree of Dyspnoea is another symptom of Gastritis tho not always present. this is not owing to the inflammation of the lungs or their investing membranes but to the exquisitely inflamed state of the stomach preventing the descent of the diaphragm and a full inspiration. thus impeding its natural motions. Fortunately gastritis is rarely an Idiopathic affection unless there exists a Connate weakness of the stomach. in such habits the most trifling Cause will produce the disease. the slightest exposure to Cold after heat. any deviation from an accustomed regimen &c operate as exciting Causes. these persons are troubled with nervous affections are subject to much gastric distress ~~and~~ sick headache. and are always puny and short lived.

The Causes of gastritis are numerous. among these Old stands preeminent as it often and led to obtrud from the fatal effects produced by drinking Cold fluids when the body is very warm after sudden exercise or fatigue, dancing &c. Cold damp linen Damp sheets or sitting the feet wet in those predisposed will bring on gastritis. In Idopathic gastritis the attack is generally preceded by a chill and the tongue is not unfrequently furred before the other symptoms are completely developed. Poisonous and Acid substances taken into the stomach: such as the preparations of Arsenic the oxymuriate of Mercury Oxalic acid the mineral acids and alkalies. In those who have labored under gastritis before or are predisposed a too free use of any ~~powerful~~ stimulant aromatic or Condiment will call forth the disease. such persons should not indulge with freedom in any high seasoned food pepper pickles mustards Cloves &c. The incautious and repeated use of stimulating Cathartics and Emetics by their operations upon the stomach they irritate its nerves, weaken its tone and bring on inflammation

The excessive indulgence in the use of "Ardent Spirits is another of the most frequent Causes of gastritis by an improper use of these intoxicating spirits for so they really act the walls of the stomach become thickened and schirrous its structure is entirely changed in some instances but more commonly the pylorus is the portion which is affected with induration perhaps owing to its glandular structure. When the pylorus becomes indurated or schirrous but a very small portion of the half-digested food is permitted to pass into the duodenum, digestion nearly ceases emaciation ensues and the poor victim of intemperance dies of inanition. It is not unusual for the mucous membrane of the stomach to slough off and the patient dies with symptoms resembling Cholera such cases of gastritis as arise from intemperance are almost hopeless they are commonly beyond the reach of medicine. Food of difficult digestion may be ranked among the numerous causes of gastritis such as half boiled vegetables — Carrots parsnips potatoes Cabbages and turnips: any sort of food if eaten in too large quantity when the stomach is debilitated nothing induces gastritis more frequently than overdistension of the digestive organs External violence such as wounds Contusions from blows or other injuries — the matter of ulcers in the fauces getting down the oesophagus into the stomach — Corroding its walls and injuring its nerves — The stomach becomes inflamed secondarily by the in consequence of inflammation spreading from some neighbouring part as the Liver the Duodenum Spleen Intestines &c. The most severe attack of gastritis the writer saw was consecutive of Hepatitis. The disease travelled from the Liver on the Peritoneum and intestines and finally attacked the Stomach. The inflammation appeared in the fauces after passing up the oesophagus. This spread of inflammation cannot be owing to sympathy; there is a more rational mode of accounting for it the similarity in organization and structure of the parts successively invaded by inflammation. The Peritoneum can seldom escape when the subjacent viscera are in a state of inflammation — How often do we see inflam-

— mation

of commencing in the fauces extending downward through the Oesophagus and stomach pervading the intricate and numerous convolutions of the alimentary canal and ~~and~~ appearing at the verge of the rectum

Gastritis like other inflammations may terminate either by Resolution suppuration or gangrene tho the latter ~~event~~ event rarely occurs the reason is obvious when we consider the importance of the organ involved its functions relations and its high state of life we must infer it will not sustain that quantum of inflammation necessary to bring on gangrene & sphacelus of its secreting coats the system must and will sink under the force of the impression before mortification can take place If the symptoms yield in the early stage of the attack to the proper remedies the prognosis is favorable the tendency to resolution and recovery may be known by their abatement But if no remission takes place and every effort to arrest the progress of the disease proves unavailing the patient seldom survives more than two or three days. If not checked in its career the debility increases with frequent tossings of the body constant retchings for nothing can prevent a moment's sleep. the strength fails respiration becomes short ~~and~~ hurried and interrupted. with hiccup cold clammy sweats weak fluttering pulse syncope and death. Resolution may take place in a week or two if the symptoms are not immediately severe but should the symptoms tho moderate extend beyond that period we may expect the ~~suppuration~~ termination. When this event takes place it may be known by a remission of the pain and other urgent symptoms a sense of weight about the epigastrium with some anxiety & cold rigors which always are characteristic of the formation of abscess in any ~~other~~ important part of the system, and unless the matter is thrown into the stomach and ejected by vomiting or passed off by stool a hectic fever ~~soon~~ succeeds which soon carries off the patient Many cases are upon record which terminated favorably after suppuration the ulcer healed and the

patients got well But instances of such favorable termination are not very numerous

The Treatment of Gastritis differs but very little from that of other inflammations of the abdominal viscera there are however some points of difference which the practitioner must attend to. for the symptoms of gastritis are extremely deceptive, particularly the state of the pulse for the intensity and acuteness of the inflammation, and state of the pulse as felt at the wrist are by no means correspondent The action of the heart is so weak that an unwary physician would startle at the idea of abstracting blood as the first indication in the treatment In inflammation of the other parts of the system we use the lancet to depress arterial action and reduce the force frequency and volume of the pulse but in gastritis we bleed to raise it The depressed pulse of gastritis would be a deceptive and fallacious guide. ~~Bleed we guarded by appearances have decidedly or subsequently~~ For in this disease the pulse never becomes more full expanded and natural in proportion to the quantity of blood drawn and the frequency of repetition the strength and tone of the general system are also raised by it provided the quantity is accommodated to the stage of the attack At the onset of the disease we may bleed freely and often but in the more advanced stage it is necessary to proceed with great caution ~~The~~ blood must be drawn from a small orifice and but little at a time The lancet is an only sheet anchor in ~~the~~ formidable disease for we can do little else than bleed. Abstract blood until the force and volume of the pulse are increased. Should the pulse rise upon the first bleeding repeat it until the most urgent symptoms are subdued and the action of the heart brought to its natural standard If the disease is so far advanced and the patient so feeble and debilitated that you cannot take blood from the arm bleed locally. Cover the abdomen with leeches after placing your patient in a warm bath use cupping ~~and~~ scarification & fomentations ~~and~~ Cover

the abdomen with a blister. Blisters are improper in the early stage of this disease as they are at the beginning of all other inflammatory affections by their stimulant qualities and the irritation they produce they aggravate the symptoms: To procure a soluble state of the intestines and evacuate their contents enemas are the only resource left, tho' Olive oil and super tartrate of Potash might be tried through the stomach they have been retained and the best effects produced from them in the hands of the able professor of Theory and Practice in the University of Maryland. When gastritis is symptomatic of an inflammatory affection of the Liver mercurial unction should be immediately commenced in conjunction with the other antiphlogistic remedies above respond to the unction should be continued until a slight ptyalism is brought on the mercurial impression prevents relapses while it removes the primary disease. If on distention is the cause a thing which very often happens in those predisposed or whose stomachs are debilitated from intemperance or in any other way. If should the natural efforts of the stomach and the parts concerned in the act of vomiting be incompetent to expel the offending matter administer a brisk cathartic and enema and bleed if necessary at the same time quiet the stomach by fomentations and the warm bath. Emetics in such cases are highly improper they increase the irritability ~~irritation and debility~~ of the stomach ~~while they~~ and augment the danger. Should gastritis be produced by any of the poisonous substances above mentioned taken into the stomach if spontaneous emesis has not already taken place it must be excited by some prompt emetic such as the Sulphate of Zinc and Cupreum given in large and repeated doses until this effect takes place sheathing the stomach at the same time from the corroding effects of the poison by some mucilaginous preparation exhibiting an opiate occasionally to allay gastric distress. Some

of the Metallic Salts may be decomposed in the stomach and their virulence counteracted by the proper chemical antidotes provided they have not remained too long in contact with the internal surface of that organ. or the usual means may be pursued for their rejection. Repelled eruptions often give rise to gastritis, our proper indication is to recall the eruptive disease to its former seat by the warm bath &c. If from large quantities of water drank while the temperature of the body is increased by exercise &c. give Laudanum or brandy, in all such cases the excitability is rapidly exhausted and death soon follows unless the remedy is promptly administered. To allay the urgent thirst which constantly harasses the patient to a distressing degree milk and water molasses and water or a watery ~~weak~~ solution of gum arabic may be given. Water alone will remain when all other fluids are rejected. The ~~fluids~~ drinks should not be much below the temperature of the body. For cold drinks in gastritis increase the inflamatory diathesis augment the distress stimulate the stomach and excite spasmodic sensations. The quantity of drink should be small and frequently given. Milk warm from the Cow has been retained in some cases. After the force of the disease is broken mild anodyne injections with 50 or 60 drops of Laudanum will ~~for~~ aid in procuring the patient some sleep. The patient during and after the attack should be carefully guarded against external cold nothing is more requisite, let the temperature of the apartment be uniform and congenial to the feelings of the sick. for in this disease ~~they~~ it is seldom that the patient complains of being too warm. Keep the blister on the abdomen discharging for some time after the ~~the~~ attack; it operates as an issue producing a determination to the ~~blistered~~ surface relieves the engorged vessels by causing them to

contract and unload themselves &c It is seldom after a severe attack of gastritis that the stomach regains its former tone it remains weak and liable to inflammation from every exciting cause. In attempting to restore this organ to a healthy state warm fretions with some stimulating liniment on the region of the stomach will contribute to this indication the warm bath joined with warm clothing and flannel worn next the skin are nearly all that can be done during convalescence. Above all things tonics are to be avoided the nervous system is so shattered and the excitability of the stomach accumulated to such a degree that the most trifling article of this class of remedies taken internally might produce a relapse. Persons who have once suffered from gastritis should ever after avoid exposure to colds absolute temperance in food and drink are necessary the diet should be chiefly farinaceous with milk by these means aided by the fresh breeze and gentle exercise may restore the patient to a tolerable though precarious state of health during convalescence the bowels must be kept in a soluble state by the regular exhibition of some mild enema

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Scott, Oliver G. —

The following pages continue the dissertation on Cynanche Trachealis written by Oliver G. Scott — his title page and first two pages of text are at the beginning of this volume.

a great portion or even the whole of the bronchial ramificatoins. More commonly as has been shown by Bretonneau, the inflamation commences on the tonsil, or the pharynx, and from thence spreads at the same time downwards to the larynx, and upwards to the nostrils. The affection usually stops at esophagus but occasionally the false membrane extends to the stomach. In children the disease almost always begins in the bronchia, or larynx, & very rarely extends beyond the glottis; while in adults it more frequently originates in the tonsils & pharynx. According to Laennec, Mr. Bretonneau has also shown, that which has been called plastic angina, has been frequently mistaken for malignant sore throat. While however, Dr Forbes admits the correctness of the statement that what has been often considered as gangrenous affection of the throat, is merely an inflamation of the same kind as that of croup, and characterized by the formation of a membranous exudation of a peculiar kind, he does not assent to the proposition that simple croup, or croup unaccompanied by any pharyngial affection does not exist as a separate disease *).

Dr Good has described the disease in the following manner, thus this disease says the Doct. usually commences with the common symptoms of a catarrh, but essentially consists in a peculiar inflamation, that spreads through different parts, or even the whole range of the windpipe, from the larynx to the minutest ramifications of the bronchia. In this extensive sense the tube was called bronchus by the ancients, and Dr preferred the

* See Laennec on diseases of the Chest p 119 2d trans by Forbes.

term. Bronchitis, says he, to that of Trachitis - a membranous inflamation of the trachea, as such a term would imply a limitation of the inflamatory action to the upper part of the bronchia alone to which it is not confined in either of the terms before us. The acute Croup though it extends thus widely, usually commences in the larger part of the tube, during which a peculiar effusion is secreted that readily assumes a membranous form, & sometimes lines not only the trachea above its bifurcation but also its minutest branches, though the larger parts are always affected first. When chemically examined says the Dr. the secretion appears to consist chiefly if not entirely of coagulable lymph of the blood diluted with its serosity and copiously combined with the peculiar substance of the blood detected by the labours of the chymist, which from its essential tendency to contract into fibrous & even membranous texture, has been denominated by the name of fibrum.)

Dr Cullen asserts that acute croup seldom attacks children until after they have been weaned, and there is no instance of its occurrence in children above twelve years of age. From what little I have seen of the disease, and the different accounts I have got from different authors, upon this subject, I am disposed to believe that it may occur either in the infant at the breast, or in the adult under particular circumstances. We have good authority for its existing in adults.* Dr Cullens observations will hold

* See Gregory's practice Vol. 1 Page 85 & C. Pottings note

to suppose that that is why it more frequently occurs in children immediately after they are weaned.
The predisposition to this disease, I am of the opinion exists in some children from the time of their birth, and is much increased from the circumstance of their being compelled to subsist on food, different from that which had been previously afforded them by their mother.
The case above related as being one exception to Dr Cullens general rule, was one in fact which ought only to be considered as a partial exception to the general rule in lieu of a complete one on account of the child's mother being very delicate, & not competent to furnish it with the necessary supply of food, from the resources of her own system; therefore, the child might be said to be partially weaned, as it had to subsist in some measure from ~~the~~ food administered by the spoon.
When this predisposition is not sufficiently well developed, at the time of birth may not this change in the childs mode of living, in the first place give rise to an increased predisposition, or be the predisposing cause itself, and after the predisposition is sufficiently well developed, may it not prove an occasional exciting cause, along with many others, such as cold vicissitudes of weather, or exposure in any manner whatever.
The application of cold appears to be the general cause which occasions the disease, and therefore it occurs more

frequently in the winter, & spring, than in any other season of the year. It has been observed to be most prevalent in marshy situations, and near the sea coast. Now this being the fact is it not reasonable for me to suppose that this disease is brought frequently into action, by the functional derangement of some of the organs concerned in the process of digestion, which gives rise to an interruption of the healthy action in the system, particularly on the accession of such an exciting cause as that of a complete change of diet.

I am not of the opinion, however, that functional derangement caused by marsh effluvia, is invariably antecedent to this disease. For I believe that change of diet alone can effect nearly all towards, the development of this disease, that is effected by marsh effluvia, where there is much debility & a proportionate degree of morbid excitability, in the part concerned in the disease. When both these causes are operating, it is easily to conceive what an aggravated form the disease may assume whenever there is an interruption of healthy action, whether caused by suppressed perspiration, or exposure to a low temperature, or the effects of marsh effluvia, or change of diet, it is easy for us to conceive in what manner the disease comes to make its appearance in the mucous membrane of the trachea, when we know that debility may be present in one

organ more than another, or in other words that one organ may be much more prone to disease, than others, and that in different periods of life different organs are more prone to diseases than others.

If Physiologists ever discover the true office of the thymus gland, who knows but what it may throw some light on the etiology or pathology of this disease, as it appears when this organ is present, and generally disappears when the gland ceases to exist. In subsequent periods of life the susceptibility of other mucous membranes to disease increases beyond that of the part affected in Croup. Children who are much predisposed to this disease, often make their predisposition known to their parents, providing they are acquainted with one or two of the most prominent symptoms. When they are slightly exposed to cold, they have that peculiar sound of voice when coughing, which is known only to accompany that disease and a few others that affect the vocal avenues.

When this disposition has once revealed itself in this manner, it is desireable that the parents should exercise a great of care, to prohibit the child from exposing itself to any vicissitudes of weather or temperature, and to keep it comfortably clad, also to pay the utmost attention to its mode of diet and state of its bowels. If they perceive that the disease continues to progress they ought immediately to call for medical advice, as there are but few diseases that demand so imperiously demand, active remedies in the

initial stage to ensure success. This appears to be a disease with which the remedial efforts of nature can do as little towards accomplishing a cure as almost any other. When it is left to travel its own course, without the interference of art it is terrible in its nature, & deplorable in its consequences. And with the interference of art it is mild in its stages and perfectly manageable throughout. And that is a great consolation to the physician as well as to the anxious mother who is always pleasurably, or alarming, anticipating the arrival, or departure of her most beloved. ~~The~~ Symptoms, a day or two antecedent to an attack of this disease; the patient appears drowsy, inactive & fretful, the eyes are somewhat suffused and heavy, & there is a cough which from the very first has a peculiar shrill sound there is also a slight hoarseness & sneezing as if the patient was about to suffer from an ordinary catarrah. And to these in a short time succeed a peculiar shrillness & singing of the voice, as if the sound were sent through a bugle ~~tube~~. Dr Cullen who has well described the progress of this disease, says there is a sense of pain about the diaphragm some difficulty of respiration with a wheezing sound in inspiration, as if the passage of the air was shattered. The cough says he which attends it is sometimes dry, and if any thing be spit up, it is a matter of purulent appearance & sometimes films resembling portions portions of a membrane, together with these symptoms says he

there is ——— a frequency of the pulse a restlessness & an uneasy sensation of heat. When the internal fauces are examined they sometimes exhibit no appearance of inflammation, but often redness & even swelling appear & sometimes there is an appearance of matter like that rejected by coughing. With the symptoms now described and particularly with great difficulty of breathing & a sense of strangling in the fauces, the patient is sometimes suddenly cut off. To the above mentioned symptoms & may annex that the expression of countenance is very different from that of health, & is indicative of great distress, from the immense struggling on the part of the little patient to inhale some fresh air, the lips & cheeks are of a livid hue which bears unequivocal evidence of the blood not being properly decarbonised in the lungs. The membrane formed in this disease is nothing more than the product of inflamation or increased action of the vessels, that are so minutely ramified throughout every part of the mucous membrane, through the medium of the delicate cellular tissue which enters into every part of the body that requires any degree of nutriment & from the peculiar arrangement of the structure of the parts affected by the inflamation ~~of the~~ is prevented from terminating readily in either adhesion or suppuration, but is facilitated, in the operation of forming new matter

The component parts of this membrane shows that it is regularly organised, and endowed with life & the power of growth as long as there is sufficient flow of pure arterialized blood to their parts. When the vessels destined for the nourishment of that adventitious membrane, are no longer able to keep up a supply of nutritive material, the membrane must certainly become languid in its action, and begin to undergo that process to which all dead organised matter is liable, and be detached from the living parts by a process of nature. This disease is to be distinguished from asthma, by the croupy sound, by the shrill voice, the high coloured urine, and the febrile heat, which appears in croup. In Asthma there is little or no cough there is also a remission in the symptoms in asthma there is also some evacuation such as belching, vomiting & purging which is not the case in croup. In asthma the pulse is not febrile nor full, the urine limpid & the voice croaking & clear. Some writers have made a distinction between this disease & one that is said to be a spasmodic action of the larynx & trachea but Professor Potter asserts positively that no such thing as spasms can occur in croup, in either of the diseases of which the upper appendages of the lungs are the seats, When in a state of inflamation a irritating cause acts upon the muscles great pain and tension are excited, but they are so completely antagonised that they cannot close the passage. The sonorous cough says he-

See Mosby's Dic. page 138

which is compared to the barking of a fox is occasioned by the rigidity of the inflamed muscles.

Treatment. Every practitioner ought to bear in mind that this disease demands prompt & active remedies for its cure. & that there is not so much reliance to be placed in searching into & correcting the remote cause as in counteracting the inflamation & preventing the further effusion of coagulable lymph, & promoting the loosening & discharge of that which already inverts & obstructs the larynx & trachea. There is a continued effort on the part of the patient to remove the adventitious membrane by coughing but the cough is for the most part dry & ineffectual, & nothing more than a little flaky mucuous is excreted. Very copious bleeding (says some writers) at the commencement of the attack has broken down completely the inflamatory action & carried off the disease at once.

There ought not to be much reliance placed in the application of leeches to the parts nor in simply taking away blood from the arm, as both these remedies frequently prove ineffectual particularly in corpulent children, as it is a difficult matter to abstract a due proportion of blood from these simply by opening a vein in the arm or the application of a few leeches ~~& without~~ without the application of cupping glasses. Under these circumstances where the breathing is becoming more & more laborious the practitioner ought immediately to proceed & open the jugular

See G. & B.

which is conformed to the [illegible] of a [illegible] as were observed by the majesty of the [illegible] [illegible].

Treatment. Severe purgatives ought to be administered for the [illegible] remedies for its [illegible]. If that there is not so much [illegible] to be [illegible] [illegible] [illegible] correcting [illegible] [illegible] as is [illegible] [illegible] [illegible]

vein or some vessel which would enable him to draw blood ad deliquium. The physician ought always to put into execution such active means before the disease runs on too long. This he has generally to do without permission on the part of the Mother but in the case where death is so frequently the result without the proper remedies it is highly necessary that he should enforce his measures or free himself from being responsible. Calomel forms a very important in the cure of this disease & without which there would be comparatively few cases cured. This remedy ought never to be neglected if there is the least degree of danger attached to the patients situation & it ought also to be persevered in as long as there is any probability of the patients recovery. When this medicine is administered says Dr Potter it is prescribed in doses so insignificant that the practice is rather calculated to injure the reputation of the medicine than to cure the patient. And practitioners who have had an extensive practice & a favourable opportunity of becoming acquainted with the merits of this drug have asserted that when judiciously administered it is unparalled by any other for success. If this medicine not less than from x to xxx gr. ought to be administered to young children & this continued every two or three hours till there is a discharge of green bilious matter which is an evidence of its having taken effect. It is said that this is not only a salutary counter action

but prevents the further secretion of lymph.
Emetics are esteemed highly by some physicians & have no doubt but what they are highly beneficial in many instances but more frequently so when applied in the forming stage of the disease. They can be given in this stage with considerable advantage & their salutary influence & benefit is to be attributed to their restoring the equilibrium of the circulation & inverting the diseased action.
In an advanced stage of this disease it is almost impossible to produce emesis by any of the ordinary class of medicines intended for that purpose the stomach is no longer susceptible of their action as to give rise to an inverted motion. In that insensible state of the stomach which is so often to be observed where the secreted fluid impedes the passage of the air to the lungs the bi chloride of Mercury forms a safe & efficacious emetic. This remedy often excites a soreness of the gums but scarcely ever a profuse salivation. The sublimate I consider well worthy a fair trial & I shall not despair in any case where it has not been exhibited until experience teaches me something to the reverse of its being well adapted to such cases.
When Emetics are relied upon in the first & second stages I think that the antimony is far preferable to any other substance belonging to that class.
Its powers of allaying high action in the arterial

system is well known to any one who has administered it & watched its effects. The article when combined with calomel as recommended by Dr Potter forms in my estimation one of the most effectual remedies that can be given in this disease & this remedy when employed conjointly with that of blood letting constitutes in fact nearly the whole treatment.

In short Vs, Calomel & Antimony & a strict adherence to the antiphlogistic regimen constitute the treatment in addition with blisters, expectorant & warm baths. Blisters are not to be applied until bleeding & purging have been dispensed to a certain extent.

Tracheotomy as recommended by some is considered a doubtful remedy as yet.

Expectorants useful in all cases from their general tendency to relax the system & keep down high vascular action.

An Inaugural Dissertation

On Hemoptysis,

Submitted to the examination of the Faculty,

Provost and Trustees of the University of Maryland,

For the Degree of Doctor of Medicine,

By William B. Lecompte.

1833

Samuel Baker M.D.
Professor of Materia Medica and Therapeutics
In the University of Maryland.

Sir

Since it is to you that I am indebted, for a considerable share, of the most valuable medical knowledge which I possess, and for a multitude of leading principles and maxims which may serve to guide me in my professional career, permit me to dedicate to you this day, as an humble, though sincere testimonial of my high respect for your person, and exalted admiration of your extensive scientific acquirements, and moral excellence which few have the good fortune to attain, and combination of which only can constitute the truly wise.

William B. Lecompte.

When I surveyed the task, of producing a dissertation
on the subject of Haemoptysis, the difficulties with which
it seemed to be associated were almost sufficient to have
deterred me from undertaking it; and my fears were
heightened by the consideration, that the scrutinizing tribun-
al, to whose inspection my first medical essay must be
submitted, was able to detect every fallacy, to perceive every
sophism, to notice every imperfection. But a knowledge of
the integrity and magnanimity of that tribunal, is calculated
to chase away those apprehensions, and even to inspire me
with a hope of obtaining some approbation from him whom
age, experience and learning have taught the extreme fal-
sibility of human understanding, the wastedness of youth and
the intricacy of science. By such it could not be expect-
ed that a tiro in medicine should array himself in the equip-
age of a censor, to impugn the doctrines that have been
promulgated, by the most erudite of a learned profession
that he should be able to arrange and harmonize a crude
and undigested congeries of opinions; or to build up a bold
and regular pathological fabrick, from a collection of hete-
rogeneous materials. If therefore the present undertaking miscar-
ry, I shall have good reason to look for indulgence.
And if I shall have surpassed my utmost calculation,
should I succeed in pointing out some of the most promi-
nent traits in the character of the disease under consid-
eration, and in deducing from them correct principles of

treatment. For although we are told by the illustrious Roman orator, that a man should aspire to the highest degree of excellence, an attempt on my part to follow out this precept would be justly regarded, as the effence of arrogance and vanity. Indeed if I attain the honour of stopping at the third, or fourth degree, I shall have no just cause of complaint. But should this production contain nothing that is excellent, or even tolerable, the consciousness of having designed well will be a source of consolation.

An illustrious countryman, Professor Rush, whose distinguished philanthropy should be the model of every Physician, judiciously remarked, that, no morbid affection should ever be treated with indifference; since diseases, apparently quite trivial, had terminated fatally, even where there was not the slightest ground for apprehending such an event. In no disease is a strict adherence to the invaluable maxim, respice finem, of more essential importance, than in hemoptysis, for although it makes its appearance for the most part in persons of a peculiar delicate habit of body which we shall treat in sequela, yet its occurrence is not unfrequently observed in those whose corporeal constitution is by no means defective, whose original stamina are apparently strong, and whose general appearance exhibit no marks of predisposition.

This fact is worthy of primary consideration, because the disease is often overlooked, when it appears in hab- its presenting none of the usual indications, of imperfect pulmonary organization; and because it often arises spontaneously, without any manifest cause, as readily disappears, or is removed by the most insignificant reme- dies, and unaccompanied by any distressing symptoms It is obvious that a malady of so invidious a character well calculated to evade proper investigation, and continue on, disregarded by men of contracted ingenu- ity, committing its ravages in the dark, until its direful consequences discover the secret work of death. Although this may be regarded and even ridiculed as a magnified picture, I am conscious, from my own observation, that it does not deviate from the real image; and the end to which I allude should never be forgotten. That hæmoptysis is, almost inva- riably, the precursor of phthisis pulmonalis, the most enlightened of the medical fraternity acknowledge and maintain; the direful and destructive effects of the latter disease are too well known to admit of dis- pute; the former then evidently demands the earnest attention of every philosophic and benevolent prac- titioner of medicine. The importance of these truths being too obvious to escape notice, might we not reason- ably expect to find in the writings of scientific men,

whose researches have consumed the midnight oil, and are now treasured up in perpetual archives, are established pathological principles, upon which we might rely, in the remedial management of this disease? the discrepant opinions and hypothetical notions which have prevailed amongst celebrated authors, on the contrary, are calculated rather to embarrass, than to instruct the anxious practitioner. We are not surprised that the doctrine of exosmosis, as ~~maintained~~ explained by Lutrobet, has fallen into disrepute; for it is impossible to conceive how blood could percolate through the densities of those vessels which are destined for its reception and retention. It is easy to conceive indeed that such an effect could not be produced, without a degree of relaxation wholly incompatible with their texture, and with the physiological laws by which they are governed; neither do autopsic phenomena present anything in concordance with these views. According to the opinion of Bichat, whose great ingenuity and extensive research never failed to throw light on every subject which he touched, the blood is made to exude through the exhalents which, from diseased action, are induced to circulate red blood. It is true, that those vessels which, ordinarily, contain nothing more than serous fluid, may be dilated to such an extent, as admit the red globules; but this error loci cannot take place, except in cases of violent excitement;

[illegible] necessarily [illegible] consumer [illegible] [illegible]
[illegible] are [illegible] [illegible] by [illegible] [illegible]
[illegible] distribution [illegible] [illegible] [illegible] [illegible]
[illegible] supply [illegible] the [illegible] [illegible] [illegible] of the
[illegible]? The [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible]

d it is evident, that extreme vascular action does not
tend hæmorrhagic discharges in general. Although these views
f the subject are not, altogether, in conformity with the laws
f the animal economy, yet they are certainly in a degree coin=
dent with the opinion, that all the arterial ramifications
minate in the radicles of the veins. If I were able to ex=
ibit a complete and perfect exposition, of the several
claims which have been forwarded, in relation to the
haracter of hæmorrhage, it would be foreign to the
resent purpose to enter into detail. A single hint at a
w of them is all that can or need be attempted. Intro=
ctory to the consideration of the pathology of hæmoptysis,
will be pertinent to remark, that the minute arterial
anches, instead of terminating entirely in the venous
dicles, are partly distributed to the tissues themselves
in orifices opening into the substance of those tissues,
hich they are destined to sustain. Before we proceed
rther it is necessary for the support of this opinion
observe that our distinguished Professor of Anatomy
hose transcendent talents, extensive science and glow=
g elocution sheds a lining lustre over an Institution
ready one of the brightest ornaments of the country,
clares that, the continuity of the arterial ramifications
ith the venous radicles cannot be demonstrated by injecting all the capillaries; and
at it is impossible to conceive if such were the
se, in what manner a sufficient quantity of nour=

hment could be derived from the vessels for the nus-
rance of the organism. Such is the rapidity of the
rculation, that, sufficient time could not be suffered
elapse, for the transudation of the sanguineous fluid,
rough the vascular tunics; if it were practicable under
y circumstances. Hence the conclusion is highly logic
, that a multitude of vessels open into the tissues them-
lves, and thus pour out a quantity of blood adequate
their nourishment. On applying this anatomical char-
ter of the arteries to hæmorhagic effusions, of which
moptysis is the most considerable, a new and broad
ista seems to be opened to their true pathology.
Nothing more is essential to the occurrence of hæmorhag
an, such a state of the orifices of those vessels which
minate in the tissues as just explained, as will cause
to throw out more blood than is necessary for the
lenance of those tissues. There is no necessity of having
course to an error loci, (or of supposing the egress of
blood through the exhalents, which amounts to the
me thing) or of imagining its transudation through
coats of the vascular extremities, from deficiency
vital energy, in those parts. And concomitant circum-
tances ever occur, to corroborate the latter hypothesis
reference to hæmoptysis particularly, whenever
idinate vascular excitement takes place in the
ngs, those organs labouring, at the same time under

hereditary or acquired predisposition; whenever they
are rendered the centre of fluction, in consequence of
previous relative debility, an increased quantity of blood
ues from the patulous mouths of the bronchial vessels
a being in a state of extravasation, it gives rise to irri=
tation, or to a kind of titillation, by which coughing is ex=
ted and all the phenomena of hæmoptysis are developed.
From the abovementioned considerations, it is highly proba=
le that the pulmonary vessels are never the seat of pen=
ineous effusion, except in cases of rupture. Since those
sels are especially designed for the conveyance of the blood
rough the lungs, that it may be brought into contact
ith the atmospheric air, for the purpose of effecting its ar=
terialization, there is every reason to believe, that all the ar=
terial twigs terminate in the venous radicles. Some authors
ave entertained the opinion, that hæmorrhage always
pends upon the rupture of a blood vessel; and there are
few of the present day who take it for granted, that
hæmoptysis never occurs independently of structural
ision. Although this may be and is the case sometimes,
is by no means true in the generality; and must, almost
ways, arise from a violent exciting cause, or from ex=
ne nervous excitement. The true philosophy of this
ecies of hæmorrhage, therefore, is founded upon a
edominance of the momentum of the circulation,
er the resistence offered by the vessels; and the

copiousness of the discharge will be proportionate to the degree of excitement, the resisting force, and the number of vessels implicated. This will hold good as a general rule, to which there are some exceptions.

It has been observed that hæmoptysis most commonly occurs in persons of a peculiar structure and habit of body. Individuals thus constituted are said to be predisposed to chronic affections. Predisposition is either hereditary, or acquired, — the former is frequently observed, the latter but seldom. As this disease is generally the harbinger of phthisis pulmonalis, the same characteristic features of a predisposition to the one, is equally applicable to the other; and although these marks are observable in infancy, they are not often fulfilled, until the coming on of puberty. The period at which hæmoptysis is most liable to occur may be estimated, from the age of puberty, to the thirty fifth year; or from the time ~~that~~ when the several organs of the body rapidly unfold themselves, until the arterial system ceases to prevail; and it seldom arises spontaneously, except in those persons who labour under an original disposition which appears to consist, in an atonic condition of the sanguiferous system. The latter circumstance perfectly comports with the imbecility of the whole frame; excitability seeming to be a necessary attendant on weakness. The blood vessels are also comparatively large, and are, consequently, in the same proportion

nder the influence of the nervous system, hence the
acity of disposition; the irritability of temper; the activity
intellect, and the eminent susceptibility of the operation of ex=
ting causes, so conspicuous in such subjects. The high,
eminent and wing-like shoulders arises from a nar=
ow, flattened and depressed state of the chest; and
e latter condition would seem to depend upon an ac=
mmodation of the thoracic parietes, to the abnormous
formation of the lungs. Whilst the long slender neck,
ght hair and blue eyes; thin semitransparent skin, clear
ruical but not powerful voice, and the general delicacy
organization would appear to be the product of an ef=
rt on the part of nature, to bring the whole system
a state of equilibrium. Although the above cited marks
e are occasionally present in the same individual, yet
a majority of instances many of them are absent, and
metimes very few of those indications are to be observed.
deed cases not unfrequently occur in which the reverse obtains
ith the exception, probably, of a flattened though not
ntracted chest, and fine skin. It is a circumstance
orthy of attention, that the dermoid structure is so invar=
iably affected in predisposed constitutions, as it seems to
ince the first rate importance of that organ in the animal
conomy. We cannot account for the existence of predispos=
ion, in persons of vigorous and athletic appearance, without
pposing the lungs to be of appropriate magnitude, and

the same time, feeble in their organization; and this
vation is abundantly demonstrated, by the numerous in-
tances to be met with everywhere, and it is notorious that
ersons, in whom those organs are imperfectly constructed,
nd hence comparatively weak, do not possess that degree
f corporeal vigour which their general appearance would
dicate, and are incapable of enduring long-continued
xercise. This relative deficiency of strength, manifestly
epends, not only upon a defect of the pulmonary organs,
ut likewise upon a scrofulous taint which invariably ac-
ompanies the predisposition of which we treat; and which
as for a natural consequence a debility of the muscular
ibre. The lungs in young children of strumous habit
re frequently found covered with little tubercles; and
n some the period of adolescence scarcely arrives be-
ore the disease, of which it is the fatal omen, is evolved.
Scrofulous subjects are often affected with glandular
wellings, especially about the neck, are peculiarly
bnoxious to the influence of sudden vicissitudes of
emperature, and are incapable of resisting efficiently
he action of morbific causes, all of which are results
f feeble organization. With respect to acquired predis-
osition, I am inclined to believe that it is seldom found
For when the multifarious organs composing the
uman system are in a state of perfect coincidence
e with another, their strong connections rise dependen-

ies in complete array; when harmony of structure and harmony of action prevail throughout the whole organism considerable and protracted violence is undoubtedly required to effect a disruption. Nevertheless it may be induced by the causes to be enumerated. Indeed it is the opinion of many conspicuous medical men, whose extensive reading and long experience render them fully capable of forming a correct judgement on this point, that the scrofulous habit itself may be brought on under certain circumstances. Persons who reside in low, damp situations, obliged constantly to breathe an unwholesome atmosphere, deprived of the comforts and necessaries of life; who subsist on coarse, scanty and indigestible food, may create a strumous diathesis, by depressing those vigorous and healthy operations in the system so indispensible to its support and preservation. Amongst the causes of acquired predisposition may be classed severe and protracted attacks of Pneumonia which have been injudiciously treated, or suffered to progress without interruption, frequently end in disorganization, or inflict immense injury upon the delicate structure of the lungs. But at the head of this catalogue should undoubtedly be placed the excessive use of spirituous liquors. It is a well established physiological law that when ever the system has been preternaturally excited, a corresponding debility invariably succeeds, and the degree of

expression will be proportionate to the quantity and intensity of the stimulus which has produced the excitement. When therefore an individual has taken a large potation of alcohol, the increased vascular action quickly succeeds; during which, a greater quantity of blood is circulated through the lungs, respiration is accelerated, and consequently those organs labour in the performance of their functions. If the draught be not repeated the influence of the first soon subsides leaving the system in a state of debility. At this period the heart and arteries acting feebly, the blood retires from the periphery of the body to the internal organs and oppresses them. Most commonly when intoxication has been produced the subject of it falls upon the damp ground exposed to the open air, and there remains for several hours in profound sleep, from which when awaked, is languid and shivering with cold; cutaneous transpiration being checked, the burden falls almost entirely upon the lungs. We can easily conceive then how those organs may become disposed to hæmoptysis by the pertinacious use of alcoholic liquors: frequent and long continued exposure to in cold damp weather, excessive venereal indulgence, or any kind of debauchery, all of which weaken the energies of the body and predispose it to disease; and as the lungs more readily feel the impulse of morbific agents, than any other organs, probably, in the human

ody; all those causes which come under the appellation
exciting may occasionally produce a predisposition
hæmoptysis. Among these may be enumerated, atmos=
heric vicissitudes, long and loud speaking; the suppres=
ion of habitual discharges; the sudden repercussion
cutaneous eruptions; metastasis of gout and rheumatism
d irritating particles acting directly upon the lungs. This
pecies of hæmorrhage is not always to be considered
primary disease. It is often merely a symptom attending
ther disorders; and being sometimes a means by which
ature throws off the onerous load which has oppres=
her, may be hailed as a favourable occurrence.
Hæmoptysis frequently gives warning of its approach
y certain premonitory symptoms. The most conspicuous
recursory indications are, a peculiar sensation of anxi=
ty about the præcordia; stricture and tightness across
the breast, a dry tickling cough; slight difficulty
breathing, and palpitation of the heart. As an increas
flux of blood taking place to the lungs, less space is
ft for the ingress of the air, and a greater quantity of
xygen being now demanded, anxiety and difficult res=
iration are the necessary consequence. Palpitation
the heart may arise, either from the obstruction
ith which the blood meets in passing through the
ungs, from sympathy, or from its receiving an un=
usual quantity of that fluid. The pulmonary nerves

ing in a state of congestion or infarction, those which
empty themselves for the nourishment of the organs, being
distended beyond their usual capacity by the reception
of more blood than they ordinarily circulate, and being
ready in a state of debility, not for their orifices to dilate
through which the fluid exudes, titillation and
coughing are excited, and the blood thrown out at
the mouth. The disease is not unfrequently ushered in
by pains in the back and loins, disorder of the di=
gestive organs; heaviness and lassitude in the extremi=
ties; all of which proceed from the delicacy of
constitution characteristic of predisposition to the disease
The blood is usually of a florid colour, and frothy
owing to its admixture with the bronchial secretion
but when it has remained for a considerable length of time
in a state of extravasation, unexposed to the process of de=
carbonization, it is changed from a vermilion to a dark
hue, participating in the character of venous blood. - Al=
though hæmoptoe is commonly preceded by the above=
mentioned indications of its coming, it is sometimes unattend=
ed by any premonitions whatsoever, as I once witnessed
in the case of an individual who a few years afterwards
died of pulmonary consumption. The hæmorrhage came
on at night without any previous manifest indisposi=
tion, so insidiously, that the patient was unable to tell
what was the nature, or source of the fluid which

ssued from his throat. In this instance the predisposition was so great that the disease took place without any perceptible exciting cause; and such must frequently be the case where the original fault in the structure of the lungs is excessive; for the blood-vessels are perpetually in so debilitated a condition, as to offer but little resistance to the fluid circulating through them; and in such cases it is often exceedingly difficult and even impossible to control the hemorrhage. Indeed there is no other way of accounting for the extreme obstinacy which sometimes attends those discharges, than by supposing the vessels to be in the atonic condition just described. When the exciting cause has acted so violently as to effect a rupture of some vessel of considerable magnitude, there can be no difficulty in ascertaining it.

When hemorrhage occurs from the respiratory passages, it is not always easy to determine from what particular part it proceeds; and a correct diagnosis is often of the utmost importance to the physician, both as regards the treatment of the disease and the feelings of the patient. When the cavity of the mouth is alone concerned, there will be no voluntary hawking or coughing unless the blood issues from the posterior part, about the fauces, (and this does not even usually in cases of wound or disease) and by

careful examination the source of the bleeding can always be discovered. As coughing and vomiting often excite each other mutually, the difficulty of forming a diagnosis may be rendered very great by the occurrence of the latter. Indeed this disease is very liable to be confounded with hæmatemesis by reason of a similitude between the precursory symptoms of each. The same sense of anxiety and oppression about the præcordia, palpitation, cold extremities and constriction about the chest which belongs to the former may also attend the latter; and as the blood in hæmoptysis is not always of a florid colour, the qualities of the fluid thrown up will sometimes fail to assist in discriminating between the two disorders. But by a proper comparison of all their characteristic symptoms; by a diligent inquiry into the history of the immediate case, and by a strict observance of the patient's constitution, there can be but little difficulty in establishing a correct diagnosis. It is a well known fact that there exists a much greater mutual sympathy between the stomach and arterial system, than between the latter and lungs; consequently the reduction of the pulse in hæmatemesis is much more remarkable than in hæmoptysis: in truth it is but little affected in the latter, unless the flow of blood be profuse, whilst it is greatly enfeebled in the former. This effect is likewise owing to the extreme nausea which

companies vomiting of blood. When there is any doubt on the subject, all collateral circumstances should be borne in mind.

In relation to the prognosis of this malady it is needless to say much. When it is merely symptomatic of other diseases, and unaccompanied by any of those signs which indicate predisposition, it is not to be considered as a dangerous affection. Unfortunately this favourable condition of things is seldom to be met with. When it attacks individuals of delicate and relaxed habits, extreme difficulty is always experienced in effecting its removal. Although the immediate consequences of the hemorrhage are not generally alarming, its ultimate effects are apt to be of the most serious character. On the contrary when it appears in persons of vigorous constitution aloof from predisposition, no danger need generally be apprehended. The bleeding is not often so copious as to prove fatal in the first instance; but when the predisposition is extreme, the frequency of its occurrence may be sufficient to produce exhaustion. Our prognosis is therefore to be deduced from a variety of existing circumstances such as the nature of the exciting cause, the constitution of the patient, the extent and effect of the hemorrhage. But we are obliged to predict for the most part unfavourably in hæmoptysis, for phthisis pulmonalis as has been already observed, is ~~the~~ almost

invariably its more direful successor.

Preliminary to the consideration of the treatment of this disease, it may be proper to observe that the propriety of a passive hemorrhage has been denied by Dr Caldwell. He states that the expression passive hemorrhage, as applied to lining membrane, is a gross misnomer. During life no hemorrhagy can possibly be passive. Blood flows from the vessel that contains it, at least in part, by means of the action of that vessel. Nor is it possible for such action to cease, otherwise than by the cessation of life in the part. Every hemorrhage therefore that does or can take place from the living body is really an active one. It arises not from the absolute want of action in the part, but from its wrong action. It is true that the vessels continue to act, so long as the system retains its vitality; but it appears to me that, if the epithet active can be properly applied to that species of hemorrhage which depends upon increased vascular action, there is the same propriety of phraseology in the application of the term passive to that which arises in cases of diminished vascular action. Therefore the terms, active and passive are equally expressive as those of tonic and atonic recommended as substitutes by Dr Caldwell; and the attempt to abolish the former division in the strain of reasoning which he has adopted must, I think, be considered as rather ultra zeal tendere.

but there can be no dispute in relation to the fact
that hæmorrhage from the lungs is almost always of
the active kind, although the possibility, or reality
of its being passive is indubitable. — In the remediate
management of hæmoptysis two objects are to be kept
in view, first the conduct to be adopted during
the hemorrhagic paroxysm; secondly, the course to be
pursued in attempting to eradicate the disorder. To ac=
complish the first of these objects the modus agen=
di naturally suggests itself. The patient should be plac=
ed in a well ventilated apartment, the utmost quietude
enjoined, cooling acidulated drinks administered, and
every means calculated to subdue excitement should be
practised. — Of all the means that have been em=
ployed in the treatment of hæmoptysis, none deserves
so much confidence as venæsection. Dr Cullen ob=
serves that the propriety of blood letting may be
doubtful here, because the quantity of blood poured
out from the lungs may be supposed to answer
the purpose of evacuation in any other way. A so
called ultimate objection to blood-letting can be prevented
by such a consideration; for it is obvious that one
great intention of the remedy is the prevention of
that copious discharge from the lungs, which
Cullen thinks may preclude the necessity of
evacuation in any other way. The blood repels

the lungs being already too weak to prevent the escape of blood from their orifices, must be rendered more impotent by the fluid's continuing to force its way through them. The principle indication then is to bring the momentum of the circulation upon a level with the resistence of those vessels which are the seat of the hemorrhage as quickly as possible; to fulfil which venesection is the most efficient means. And the superiority of this remedy will be more manifest, when we reflect that the pulse is generally found to be tense and frequent. Indeed it not unfrequently becomes necessary resort to blood-letting several times in order to obtain sufficient reduction of the pulse; and when this consideration shall have been obtained all our business is at once accomplished. I am therefore persuaded that there can be no question as to the paramount importance of venesection in all cases of active hæmorrhage from the lungs; and concerning that all other remedies dwindle into comparative insignificance. It has been observed that constipation is often one of the accidental symptoms of hæmoptysis. When present it is undoubtedly calculated to aggravate the disease. The state of the alimentary canal should therefore next be considered. Laxatives should be administered, either by the mouth or per anum, such as oleum ricini, calcined magnesia, or the neutral salts. The latter I do not admire, as they

[illegible] [illegible] [illegible] [

e apt to leave the bowels in a more or less costive
ndition, and therefore, although their immediate effects may be bene=
icial from their refrigerant qualities, their ultimate
fects which are most important, are injurious.
Hitherto, much reliance has been placed upon as=
ringents in the treatment of this disease; and when em=
loyed to the exclusion of blood-letting evidently with
eat disadvantage. Acetate of Lead, which is placed
ore near in the rank, is recommended to be given in
oses of from one to five grains repeated at intervals
nger or shorter according to the copiousness of the dis=
harge. It should be given in conjunction with calo=
el when the diathesis is inflammatory; and with
pium in cases attended with a nervous condition of
e system. — In commenting upon the propriety of the
e of this medicine, I would first inquire, what is
tended by it? is it given with a view to its astrin=
ent operation upon the bleeding vessels? and if so, what
uantity would be requisite to produce the desired
fect? Secondly, is it given with a view to its seda=
ve influence upon the whole system? and if so
not its deleterious agency to be dreaded? After
ature reflection I am convinced that every intelligent
actitioner would resort to this remedy with reluct=
ce; more especially as the action of lead is ex=
emely unequal, that it is liable to be modified

idiosyncracy; and consequently it would not be easy
regulate its dose so as to obtain its beneficial, without inc
ring the hazard of its injurious effects. I am therefore
pposed to believe that good has seldom resulted from
administration of acetate of lead alone, but that the
vantage arising from the calomel and opium with
ich it is commonly given in union has been improper=
ascribed to it. That opium may be useful in
ses attended with nervous symptoms there can
no doubt; and when administered in conjunc
n with calomel and ipecacuanha in small dose
ay constitute a valuable auxiliary to blood-letting
hen the pulse is irritated, frequent, and small.
e opium is admirably calculated to calm the agita
n of the nervous system; the calomel and ipeca
romote the action of the cutaneous capillaries, kep
a regular healthy secretion, and to equalize the
culation. When the feet are cold and the counte
nance pale and contracted, warm applications
the feet and sinapisms to the thorax are useful
n directing the flow of blood from the lungs
pecially where the condition of the patient contra=
icates the efficient use of the lancet. Nitrate
potash, dissolved in some mucilaginous fluid
e taken ad libitum, from its well-known cool=
g and diaphoretic qualities may prove a useful

medy for febrile excitement. When hæmoptysis
attended with cold extremities, alternate flushing
d paleness, limpid urine, small hard pulse,
d much anxiety in the chest some authors have
vised the use of emetics. I am decidedly of the opin-
, that such a practice would almost invariably
ove detrimental, in consequence of the congestion
ion to the lungs by the effort of vomiting. It
true that their relaxing effects are calculated to sub-
e inordinate action, but as the latter advantage can
obtained without incurring the same danger
re can be no doubt but that their employment
uld be once dispensed with. If the presence of
nditics in the stomach were likely to create irrita-
on which might be propagated to the lungs, an
ersion of magnesia or castor oil would be prefe-
ble; for the utmost tranquility is necessary in all
ses, & after the immediate hæmorrhage has been arrest-
and the patient brought to a state of convalescence,
becomes necessary to adopt such measures as may be
ost effectual in preventing a recurrence of the disease
holds an hereditary disposition exist in the system
e attempts to effect its removal will in general be
itless, especially where the habit is strumous. But
ere no scrofulous taint lies at the root of the dis-
e, hopes may be entertained of its entire eradication

he most efficient means, for this purpose, consist
- regimen exercises and occasional medicines. The diet
ould be light, uninitating, and digestible, but nutritious
a corroborant; the drink cooling and free from all
iritious or stimulant qualities except occasionally the
ore permanent kind. Nothing can be more indis-
nsible to the wellfare of the patient than the preservation
an equable temperature of the surface of the body;
lannel should therefore be worn next the skin, the
ternal apparel accommodated to the changes of weath
, and a humid atmosphere carefully avoided. Exer-
ise on horseback, in a carriage, or on foot according
the condition of the patient should be enjoined
ut should never be carried so far as to produce
y considerable fatigue. The medicinal means
hould be directed to the stomach and intestines. The
ucet should be used to overcome inordinate action.
When no scrofulous diathesis exists mercury is often an
ximable remedy, but will seldom fail to aggravate
e malady when it does exist. Traveling and a sea
oyage are often exceedingly beneficial from the change
f company and fresh air. It would be superfluous
s to mention the vast multitude of means that might
e employed in the treatment of Hemoptysis. We must
roceed upon general principles, choosing for our only
uide the various symptoms as they may be unfolded.

he efficacy of common Salt in hæmoptysis and
modus operandi affording a subject of some in=
est I have reserved until the last a few observations
on it. This apparently contemptible remedy was first
tentively used by Dr. Rush whose keen penetration and
exemplary benevolence enabled him to make useful ap=
ications of many substances which the pride and self=
eeps of some eminent physicians caused to be rejected.
is observed that a tea-spoonful of fine salt will not un=
equently put an immediate stop to the effusion of blood
d it becomes an interesting inquiry, how this effect is so
uickly produced. At first sight it would appear that
e salt is taken up by the veins and lymphatics of the
omach and conveyed in the space of a few minu=
es into the tide of the circulation, just as we sometimes
ind rhubarb passing out per urethram in a
ery short time after it has been taken into the stom=
ch. But when we consider the complete continuity
surface upon which substances act in their pas=
ge from the mouth to the stomach, the more
obable modus operandi of the salt will ap=
ear to be that it exerts a stimulating influence
on the mucous membrane with which it comes
o contact (this membrane being perfectly contin=
ous every where with itself) which stimulus being
adily propagated to the lungs, enables the bleeding

sels to contract, and thus to prevent the further escape
blood. - The administration of Common Salt, in hæm
typis, is, therefore, perfectly consistent with the just
inciples of medical philosophy.

Dissertation
on
Bilious Fever as it usually appears
in
Chester Town
and its vicinity
Submitted to the
Faculty of the University
of
Maryland March 20th 1830
by
Joseph Brown

Kent County, on the Eastern shore of maryland is bounded on the north by the river Sasafras, on the East by a north and South line which separates it from Kent in Delaware; on the South by the River Chester; and on the west by the Cheapeak Bay. The County is a peninsula, the head waters of the Chester and Sasafras approaching within a few miles, and is deeply indented by broad and navigable creeks; there is probably no house in the County more than four miles from navigable water and the whole County is intersected in every direction with fresh water streams running into the Creeks and Rivers.—

Equally removed from the Mountainous, and the uniformly level the land is beautifully undulating, presenting a pleasingly variegated aspect of hill and dale, cultivated feilds, and woodlands. The quality of the land is generally good, and notwithstanding the evident neglect of improvement yields plentiful crops, the soil is as various as the admixture of sand and clay in differing proportions can make it.

Presenting these topographical features and situated below the 40' of N. Lat. it is not surprising that this County should receive an annual visit from the Bilious Fever — and with this brief preliminary sketch I proceed to give a succint account of that Disease.

Dr Rush has said that "June is the resting month of febrile diseases." our Peripneumonic and catarrhal fevers together with other cognate diseases gradually become less frequent after the middle of April, and cease altogether about June — the weather is usually mild, the thermometer generally ranging from 55 to 70° Fah. and all nature seems to enjoy that repose which usually follows a storm ~~and which is frequently preceded by tornadoes. Accordingly~~ towards the close of this month, this Disease makes its appearance in some cases of mild Remittents, always invading Children first. In July some adults are seized with a fever of the same form and of a character more durable, and less manageable, than the earlier cases.

In August, seldom sooner, Intermittents appear, and under the influence of local causes and constitutional peculiarities, mild inflamatory, or congestive conditions, according to circumstances, are produced. As the season advances, the cases become more frequent, and more fatal, until about the first of October when the Disease decreases both as to the number of its cases, and the malignity of its character, and generally the frosts of November banish it entirely.

This is the customary routine — as however seasons vary, the Disease varies, also, and sometimes appears sooner and continues later.

I must now say a few words with regard to the remote cause.
Medical men of all nations ~~and ~~ however they may ~~have~~ have differed with regard to the proximate agent in the production of this Disease, agree in referring Bilious Fever in all Latitudes to a certain something called Miasma. This secret enemy has hitherto eluded alike the cognizance of the senses, and the nicest chemical tests; it enters the human system through the medium of the pulmonary apparatus — and without making any sensible impression, produces that peculiar lassitude which usually precedes an attack. ~~[illegible]~~.
If the miasma arising from the Decomposition of vegetable, and animal matter be the cause it would be reasonable to expect the greatest crop of Bilious fever where the quantity of these remains is most abundant and vice versa. The summer and autumn of 1829 was remarkably favourable to the growth of vegetation — the crop of Indian corn was more abundant than it had been for several years. The fields were loaded with a luxuriant covering of all kinds of grass and weeds, and the low grounds literally groaned under heaps of putrefaction.
Deducing our calculations from the received theory of the production of our autumnal Epidemic, an extraordinary sickness was anticipated from this prolific source. What was the result?
In Chester Town, the central and upper portions were scourged

but the lower part bordering on the River and Docks were uncommonly healthy. In many families in water street there was not a single case of sickness; leaving the Town, the prevalence of the Epidemic was by no means general. Many neighbourhoods were exempt from its attack. One in particular, within the range of the practice of the Physicians of Chester Town, was very healthy, although the lands are fertile, the low grounds forming a considerable proportion of the surface, and the whole neighbourhood imediately in the course of the south wind blowing over a mill pond in the vicinity of St Pauls Church.

In the year 1828 the District which is called Quaker Neck, was almost entirely free from the invasion of autumnal fever. This is a narrow tongue of land stretching to the length of 10 miles and of an average breadth of one mile — Chester River bounds it on the South East Langfords bay on the north west, with an extensive mill pond at its Northern extremity, large marshes which the tide seldom overflows almost surround it, and the whole District is one continued level. In the same season the District called Still pond was unusually sickly. This is 10 or 12 miles farther north on the north side of still pond Creek, and the face of the country high and hilly.

the year 1816 according to information received from a medical friend, a few families situated to the north of a mill pond near Chester Town were dreadfully scourged: when at the same time the whole country which would be embraced by a radius of 8 miles sweeping from Chester Town as a centre presented but few cases and these not of a malignant character, although two other mill ponds are within this circumference. Also in 1822 a violent Bilious Fever prevailed in Chester Town commencing in July and continuing until checked by the frost late in October — this disease was confined entirely to the level part of the Town, not a case appearing on the high land in the upper part of it.

From the forgoing facts it is evident that the cause of fever is confined in some seasons to certain situations or districts, while no plausible reason arising from varying seasons can be assigned for the restriction to those particular limits. The celebrated Cullen, in his first lines, says that "the miasma so universally the cause of fever, is that which arises from marshes, or moist ground acted upon by heat" — this may probably be true; but there is most likely some other agent, derived from the earth, or from the admixture of other matter, in particular situations, necessary to the production of the peculiar effluvium, which is the cause of fever, besides the ordinary decomposition of vegetable matter acted on by heat and moisture — were it

wise, the disease would have a much wider ~~range~~ and more uniform range than it frequently has, or be confined to the neighbourhoods of marshes, morasses, and other sources of vegetable putrefaction.

Having thrown out these few hints respecting the remote cause I must now take some notice of the symptoms of this Disease.

mptoms. For several days preceding the decided developement of the characteristic features of our Endemic Bilious Fever, those who are to be the subjects of it feel a considerable lassitude, attended with some degree of nausea with slight fullness of the stomach and headache together with some feverish disturbance. These premonitory warnings seldom rise to such a height as to put the person who is under their influence to bed. In a few days however a chill of longer or shorter duration ushers in the disease — this is succeeded by a febrile exacerbation, pain in the head &c which, going off in a few hours with a sweat, leaves the patient weakened, but the functions are sometimes so perfectly restored, that he is persuaded the attack was merely ephemeral, and neglecting the warning, pursues his usual vocations. At the end of a certain period ~~however~~ according to the type the fever may assume, he finds himself deceived — another chill of increased violence, and duration, comes on accompanied with distressing nausea and vomiting, sometimes bilious, but more frequently of the contents of the stomach, — the vomiting usually

puts an end to the cold stage, and the fever runs its course nearly as before — such are the symptoms of our mild intermittents —

In our more violent cases of fever it frequently happens that after the disease has been ushered in by a long continued chill, accompanied with or without vomiting, there comes on, instead of a salutary degree of reaction, some sense of oppression about the precordia, interrupted breathing, resembling deep sighing, violent pain in the head, confusion in the mind, large frequent & fœtid alvine discharges, sometimes bloody, and jactitation. Though the whole surface of the body is cold, pale, and contracted, the patient complains of intense internal heat, and an insatiable thirst. The radial pulse ~~[illegible]~~ is scarcely perceptible — the stools are involuntarily discharged, coma supervenes and death closes the scene. — This is a description of the worst cases. Providentially for the sufferer a Physician or some judicious neighbour comes in and arrests for a time the stroke of the Destroyer. Some degree of reaction takes place by the application of suitable remedies — and the functions are again partially restored. The case is thus lengthened out through several quotidian, tertian, but more frequently double tertian periods; until arrested by proper remedies. —

Many cases, not subjected to proper medical treatment, go into a state attended with slow fever, indistinct exacerbations observing the usual tertian or double tertian form, the viscera suffer more or less functional derangement, degenerating ultimately into organic affections

which terminate in Dropsy, or incurable cachexy. This routine of symptoms constitutes what is known by the name of the congestive form of bilious Fever. Moreover an engorgement of the liver sometimes takes place during a violent paroxysm of fever and congestions frequently remain after the fit is over. The Brain is also frequently the seat of local congestion forming an important part of the disease and requiring particular attention. I have mentioned above that the vomiting was not always attended with a discharge of bilious matter — and when it was, the bile was doubtless emulged from the liver by the action of the abdominal muscles. But in the worst cases, there were no bilious discharges, the bilo-poietic function being destroyed or suspended by the action of the remote cause on that organ. According to my own experience those cases attended with copious bilious evacuations sursum were more easily relieved. —

Sometimes we must look for the cause why bile is not thrown up in the fact, not of the loss of the secerning power in the liver itself, but in an obstruction of the biliary Ducts. In these cases Jaundice generally supervenes, and when it arises from the above mentioned cause, adds to the difficulty of cure.

Treatment

The simple inflamatory form of our remittents generally yields to the loss of a few ounces of blood followed by a dose or two of cathartic medicine, repetition of both is sometimes necessary — The treatment is often entrusted to the purgative plan alone. If there be reason to apprehend cerebral determination, in addition to bleeding, purging, and diaphoretics, the application of Blisters to the forehead, temples or back of the neck must not be omitted. This will embrace the whole usual round of remedies for this state of fever; if the disease be a highly inflamatory remittent, with a strong determination to the brain copious blood letting is the only remedy that can preserve the lives of our patients — it must be repeated every paroxysm until its violence is subdued. In our mild Intermittents where the prostration of the vital energies is not great — where the chill is not severe and of long continuance it has been productive of great and imediate benefit to administer an emetic at the commencement of the attack, or at the incipient moment of the hot stage. By this plan it frequently happens that the stomach & bowels are completely evacuated, the viscera excited to healthy action, the circulation fully estattished on the surface, and much reaction prevented by a general perspiration — and thus the system is prepared for the imediate exhibition of those remedies (Tonics) which given with judicious boldness in the intermission, will so often prevent a recurrence of the paroxysm. — When however a fever of high excitement

prevailing we cannot exhibit tonics in the first or second intermissions nor until after copious evacuations from the bowels - without danger of changing the intermittent into the remittent form of fever - as soon as the system is reduced to a proper state for the exhibition of tonics the disease yields readily to cinchona or quinine.

It seldom happens however that the Physician is called in until the first fever is established, and all he can then do is to moderate the reaction by acidulous diluting drinks and the exhibition of cooling neutrals. Then should follow an emetic or cathartic for the purpose of unloading the intestines, and thus preparing the patient for other remedies.

If the case be of dangerous prostration, the practitioner should never allow a repetition of the paroxysm without attempting to nip it off or moderate its force by an opiate, by the application of Epispastics to the extremities, in time to be in full drawing at the period of the next accession, in aspersions to the feet, and if the case requires it, plentiful potations of brandy and water. All these means will frequently be necessary - but not always. To judge of their expediency must be left to the discretion of the Physician.

As soon as an intermission, or very considerable remission, takes place if the patient be free from headach, and his stomach will bear it, ~~[illegible]~~ the pulp of quinine should be given every hour until the return of the next paroxysm, adding six or eight drops of Laud.m to each dose for the last four or five doses next

preceding the expected attack - in cases of great Lowness six or eight d
Tpt. C. Tart: ~~ad~~ sd also be added to each dose of the Julep - these remedies, when
by the timely application of blisters and sinapisms, are almost infalli
To allay the nausea and vomiting in this Disease, nothing is so
in its effects as opium, though there are some useful auxiliar
among these Tp: Lauend. Compos: - Ept: Minth: pip: - Elix: arod: &
sinapisms to the Epigastric region, Mint toddy &c deserve particular com
ation. The nausea sometimes continues through the hot stage
When this is the case, the effervescing draught is a valuable aux
With regard to the application of Blisters it is important that th
of the Physician should be directed to the prevention, by their m
of dangerous local determinations. The brain, the liver, an
bowels, are more frequently than other organs, the seat of effusio
Large quantities of blood are frequently poured into the inte
from the relaxed mouths of their capillaries, and thus imediat
often inevitable prostration comes on. A large sinapism to
Epigastrium followed by an Epispastic will almost always pr
this dangerous symptom, and sometimes relieve it after it h
en place. - Like manner an Epispastic to the head ~~and~~ nec
and to the right hypochondriac region, will prevent or remove
tions in the head and liver, and when symptoms exist justify
conclusion that congestions in those important organs exist, the

asures should never be omitted.—

all these means, however judiciously used, there are many cases
it would, either imediately, or ultimately, terminate fatally unlys the preca
ion was taken to charge the system with mercury. This is certainly
e of the most important articles in the treatment of this formidable
ease — and we should never allow the patient's strength to sink so far
to render it probable that he would die before mercury could produce
specific effect without commencing its use. Internally if administrd,
not, externally in the form of friction; which latter mode is in all
ses unexceptionable, and is therefore earnestly recommended.
never saw a case in an adult, which proved fatal after ptyalism took
lace. In children under 6 or 8 years old, it should be used with caution
s a sialagogue — as gangrene in them is frequently the consequence
f salivation.

hese remedies judiciously used and persevered in will generally succeed
n subduing this disease; not however without the continual use of
ight and nourishing food. For this purpose prepared Sago or Tapioca are
sufficient. Animal food should in no case be indulged in until
he train of morbid symptoms is broken up, and very sparingly during
onvalescence — Proper diet, proper attention to all those things
quaintly called the non naturals will complete the cure.—

Inaugural Dissertation
on
Pertussis, or Chincough,

Submitted to the consideration of the
Provost, Regents, and Professors
of the
University of Maryland,
For the Degree of Doctor of Medicine,
by

Edward Griffith,
of Maryland.

1826

To Richard. W. Hall. M.D.

Dear Sir,

Having ever entertained the greatest respect for you, as a member of Society, and experienced the value of your eminent professional talents, permit me to dedicate to you this, my Inaugural dissertation.—

Unpracticed in the art of writing, and yet a novice upon the wide ocean of Science, nothing but a Sense of duty could have induced me, thus early, and in this manner, to test my abilities; dissatisfaction therefore, would inevitably attend the distrust I have of them, were it not completely counteracted, by the pleasure I take in Submitting this to the especial perusal of one, whose indulgence, if commensurate with his kindness, will wipe away all its errors— accept it then as an imperfect testimony of esteem and gratitude, from

your Obedt. Servt.

Edward Griffith

Chin or Hooping Cough.

This is most generally an epidemic disease, and is most indubitably Contagious, and proceeds from a Specific Contagion unknown to us. It does not like the Small pox the Measles and most other Contagious diseases necessarily produce a fever, but may run its course to the full period without showing any manifest Symptoms of fever, Neither does there any eruption appear on the Surface, as there is in many other Contagious diseases.

This disease like many other Contagious diseases affects persons but once in the Course of their lives, and therefore most generally affects Children, but there are many instances of grown persons having this disease, as is well evinced in my own case.— Me being twenty two years of age when I had the disease, and also I knew of Several adults and Some persons Considerably advanced in years, and one person in particular who was fifty years of age to have the disease at

the Same time, therefore I think that age cannot exempt persons from this disease, altho adults may have the disease in a more mild form from their being better able to resist the parasites, but it generally proves more fatal to adults, than to Children.

This disease generally comes on in the form of a Cough and Cold, with Symptoms of catarrh, for a number of days, and Sometimes for a week or even two weeks may not put on any other Symptom than that of Common Catarrh, and may run its full course without Showing any other Symptoms. But this is Said by writers on the Subject to be very Seldom the case, for generally on the first or Second and at farthest on the third week the disease begins to Show other Symptoms, and the most prominant Symptoms are, Convulsive Cough at first with an imperfect hoop, which after a Short time becomes a more compleat and perfect hoop.

This hooping Sound is caused by the Lungs being compleatly exausted of atmospheric air which causes great distress to the patient, and finding it nessesary to fill the Lungs again with atmospheric air the patient makes a deep inspiration and the air passing through the Glottis into the Trachea causes the Sound which we call the hoop, and in a fit of coughing the patient will cling to the first thing that they can get hold of, and will there hold fast until that paroxism of coughing is over; and if they cannot find any thing to hold on to they will fall down on the ground and remain there until they are releaved either by coughing up a quantity of mucous from the Trachea or by throwing up the contents of the Stomach, after which they generally fill their Stomachs again by eating a hearty

meal of victuals, the fits of coughing do not observe any exact period of returning, and occur more frequent during the night than they do through the day.

When the fit of coughing is over the patient generally breaths fast and seems fatigued for a short time after, but is so much relieved that they immediately return to their former play and amusement, the face after a fit of coughing is of a dark red colour and the vessels are full of blood, which is owing to the violent fits of coughing, preventing a free transmission of blood through the lungs, and thereby a free return of blood from the vessels of the head, therefore we frequently have an Epistaxis, or hemorrage from the nose, and other parts, which generally proves salutary, but hemorrages are not so favourable when they are very profuse.

This disease generally runs its course in Six or ten weeks but may be prolonged to as many months, and is aggravated by cold, therefore the disease is generally more mild during the Summer months, than in the winter months. Some of our best authors tell us that there is no change in the fluids of the System, I must beg leave to differ with those authors; For from the Slight acquaintance I have had with this disease, I think that there is a very material change in the Secretions about the Bronchia, for a paroxism of Coughing will very Seldom cease until there is a quantity of mucous Secretion thrown up by the exertion of coughing.

Our Professor of Practice, tells us that this disease cannot be contracted after the fever has subsided, therefore I suppose it cannot be contracted before the fever comes on.

Therefore we conclude if a patient should not have a fever during the course of the disease, that the disease could not be communicated from the patient to any other person.

When I was taken with this disease, I was on a visit to some of my friends, where there was a young child in the family, who did not contract the disease from me. — I suppose from my not having a fever during the time that I stayed with my friends, I took leave of them and returned home before I was aware that I had the disease.

After what has been said of this disease, we come now to speak of the treatment.

In the first place, if the disease does not show symptoms of much fever, the only thing to be done is to put the patient on a low diet, which I conceive to be the principal treatment in such cases; but if there be fever preasant, it is to be treated like a fever in any other disease, (viz) by blood-letting and general depletion, which will always mitigate the symptoms when there is inflamation preasant.

Besides bloodletting, mild cathartics should be used to keep the bowels in a soluble state, but large evacuations are not nepesary, but are generally injurious to the patient. —

When the inflamation appears to have a disposition or determination to a particular part as the Lungs, blisters may be used to a great advantage and may be repeated.

Emetics are also highly recommended in this disease particularly in preventing a determination to the Lungs, and those Emetics should be preferred, which have a prompt effect, such as the Tartarized Antimony, the Sulphate of Copper, or the Sulphate of Zinc. When there appears to be too great a Secretion of bile in the Liver the Mercurial Cathartics are preferable to all others.

The Second Stage is when the contagion has ceased to act on the System, and therefore requires a very different treatment, it has been cured by terror or fright, Antispasmodics have also cured this disease, such as the Castor, Ether, Musk, opium, Spirits of Turpentine, Pulegium tea, Sauer Cabage &c.

Tonics are also very useful in this Stage of the disease, and the Tar water or the Tar pill is preffarable to almost all others Peruvian bark is also very highly recommended besides many other Tonics.

Vaxination has long been used as a means of mitigating the Symptoms of this disease.

When the disease is kept up by the force of habit alone, it may be released by a change of habit, of air, Variety &c.

On
Rheumatism
A
Dissertation

Submitted for examination
To the
Provost, Trustees
And
Faculty of Physick
of the
University of Maryland
By
Jeremiah P. Hooper
1828 of Baltimore

To

John Beale Davidge A.M. M.D.

Professor of Anatomy in the

University of Maryland,

This

Inaugural dissertation

is,

With great respect & deference

for his high standing as a

Medical Philosopher & Gentlemen

Inscribed

by his most obedient and most

obliged humble servant

and pupil,

Jeremiah P. Hooper

Rheumatism is a disease that happens much more frequently in cold than warm climates. It is produced by the alternations of temperature and of consequence may properly be considered as a species of the genus Caum a.

Rheumatism has been divided into the acute and chronick and subdivisions have also been made of these according to the seat of disease

as Lumbago, rheumatism of the loins, Ischias that of the hip, Pleuritis spuria, that of the intercostal muscles, &c—

As diseases are characterized by the same signs that were one thousand years ago; it cannot be expected that I will say any-thing new relatively to them, I must then borrow them, and I am proud to say that I do borrow them from the most perfect systematick nosology with which I am acquainted I mean that of my distinguished

and worthy preceptor, the illustrious founder of this school - The acute is indicated by the following symptoms, to wit, Synocha or "inflammatory fever, pain about the joints following the course of the muscles, in an especial manner affecting the knees and larger joints, yet not sparing those of the feet and hands". The acute most generally affecting the robust and plethoric while the chronick, the aged and debilitated -

Chronic rheumatism, "After the acute

or violent strains or luxation, pains more or less ragrant of the joints and muscles especially on motion, take place, they are relieved by the warmth of the bed or external heat otherwise applied, the joints are weak and stiff; spontaneously becoming cold; little or no fever, sometimes tumefaction of the diseased parts."

Persons after having once experienced an attack of it are very liable to the disease again.

Rheumatism has occasionally been confounded with Gout but I think that it

may without much difficulty, be distinguished, by closely attending to the history of the case. In Gout we have the hereditary predisposition, in rheumatism we have not. In the former we have the disease returning at given periods, most commonly preceded by an affection of the stomach, pain at the smaller joints as those of the toes and fingers for the most part commencing at the great toe. Rheumatism does not return periodically neither have we the affection of the stomach

if we ever have it, it is incidental and not proper to the disease, for the most part rheumatism affects the larger joints, the gout the smaller. The rheumatism being a purely inflammatory disease and the gout not, irreparable mischief might be committed, were we to treat them both upon the same principle, hence the necessity of distinguishing the one from the other. In treating the acute form of this disease you should proscribe

the use of all spirituous and fermented liquors animal food and in fact all articles calculated at all to increase the action of the heart and arteries. Mild and bland drinks may be recommended. Vegitable diet to be strictly and rigidly adhered.

Bloadletting is our first and most important mean to be used in the treatment of this form of the disease. The intention of bleeding is to reduce of the heart, thereby taking off the load from the weakened or inflamed capillary vessels and giving

them an opportunity of recovering themselves.
Venesection is to be repeated pro re nata.
Purgative medicines are to be used after the
free use of the lancet, they should be such
articles as do not stimulate, the sulphate
of Magnesia, soda - senna and manna
Rochelle salts &c - It appears that the
free use of purgatives does not answer so
well as the moderate use of them; the exertion
and motion necessarily employed during the
the operation of these articles more than counter-

balance the good effects of them in reducing the action of that great instrument, the heart. Diaphoretics are valuable in the treatment of this disease, such as the Tart. Antimon: et Potassæ. - Pulvis antimonialis or James' Powder Ipecacuanha, and Mur. Hyd: Dul. in combin-ation with any of the medicines mentioned; or we may employ the mercury alone after we shall have reduced the action of the heart sufficiently we may carry it to the extent of making the gums slightly sore. The mercury will

t on the skin producing diaphoresis, on all the secerning as well as absorbent vessels. its action on the absorbents will cause, the deposition or effusion which always takes place, to be taken up; and it has been sug-gested by my learned preceptor that the mercury might in a manner similar to that of a blister - After use of the lancet, purgatives, diaphoretics mercury in small doses, we may with advantage employ the vesicatory, which acts by

on the nerves of the part to which it is applied which is conveyed to the brain and reflec-ted as it were to the inflamed vessels because they are the weakest and of course have the least capacity of any other part of the body to resist an impression, and there acting as a gentle stimulus to them, causing them to gather up and to recover their former lumen.

We will next say something of chronic rheumatism; It continues for a long

time and occasionally only terminates with the life of the patient.

The remedies for the cure of this form of rheumatism have divided into the external and external. The external are the supporting the heat of the part by the use of flannel or any other non conductor of calorie, constantly applied; the adding heat to it by the contact of bottles of warm water or hot bricks &c —

Friction has been found particularly

serviceable with some stimulating article such as the alcoholic solution of Camphor, the Tinct. Capsic, the solution of the Muriate of soda &c - The other external means are the blisters and moxa --

The internal medicines are the pulv. Doveri, here we two intentions in view, the ipecacuanha and the nitrate of pot-ash act on the skin and cause the perspirable matter to be poured out, assisted in part by the opium, whilst the opium also

allays the pain and irritation always att-endant on this particular form of disease.

Guaicum alone or in combination with Camphor, Mezereon, seneka all highly recommended. The tincture of Datura Stramonium to the extent of producing vertigo. The famous Lisbon diet drink has also been given with evident benefit. The Turpentine has been said to cure the disease

Cinchona may be used in this disease

when we have no considerable action of the circulating system it gives tone and ability to the system.

Arsenite of Pot-ash in the form of Fowler's solution by Dr. Bardsly and found rather successful in his hands.

The Oleum Jecoris Aselli is recommended by Doctor Percival and Doctor Parr has found it relieve the disease when all other means had failed

A change of Climate from a cold

to a warm latitude has been known to have cured this troublesome disease Bandaging the limb is ~~prescribed~~ used with considerable advantage

Jeremiah P Hooper

An
Inaugural Dissertation
on
Phrenitis

[redacted]

the Degree of Doctor of Medicine
By
Nathaniel C Weems
of
P. G: County
Maryland 1828

Phrenetis

In selecting the above subject to offer for your consideration I am aware of the arduous task that is encumbered on me to conform to the regulation of a long and continued usage of this institution and it is with no small share of diffidence that I present to your considerations the following remarks the brain which is the seat of this formidable disorder. it performs a function in the animal system so necessary to life that it cannot with impunity for a single instant be suspended It is the seat of reasoning faculty the sensorium commune and to which all impressions are transmited by the external senses and by a peculiar inherent power of this organ they are worked up into ideas whenever any impressions are made upon the sensitive extremities of a nerve it is conveyed to the brain by this nerve where a second impression is made

and by this peculiar inherent power of which we have been speaking it is formed into an idea having thus offered these premonitory remarks upon the function of this organ we will now proceed to account for the phoenomena of the disease which we have under consideration. Phrenitis as its name implies signifies an affection of the mind it consists in an inflamation of the brain and its investing membranes. This like many other inflamatory affections may properly be divided into idiopathic and symptomatic. It is the idiopathic variety of which we propose to treat, but besides this division it may also be divided into acute and chronic but the chronic is generally considered under another head of Hydrocephalus Internus, of which we will not treat. The symptoms of the acute Idiopathic phrenitis are

as follows, violent pain in the head great intolerance of light and noise red eyes, flushing of the face hot dry skin, suppressed secretions with a white furred tongue and all marks of acute inflammation a sparkling wild look in the eyes confusion of ideas which rapidly increase to violent delirium and extreme sensibility and contraction of the iris when exposed to the rays of light, and throbbing pains in the back of the neck and head full strong and irregular pulse frequent ejaculations with a temporary loss of memory all the symptoms gradually increasing untill the patient becomes quite furious and requires great assistance to confine them. Phrenetis may be distinguished from Mania by the suddenness of its attack and violence of its symptoms, by the greater degree of arterial excitement by the flushed countenance by the dryness of

of the eyes and other marks of strong inflamation
Phrenetis like many other inflamatory diseases is
frequently preceded by a chill, Having thus pointed
out the most frequent and characteristic symptoms
of this disease we will next proceed to the consideration
of its causes, This like many other diseases proves
an curse to human life produced by that most
abominable and disgraceful king of vices frequent
inebriation it is more common in hot climates
than any other and produced by the combined
action of intoxication and vertical rays of the
sun directly upon the head particularly in the
plethoric habits subject exposure to cold after
great heat violent passions of the mind and
sudden suppression of a long and continued
evacuation such as old discharging ulcers

Hemorrhoids. Catamenia. Epistaxis and long continued cauterions. Excessive venery various kinds of poisons taken in the stomach and exposure to intense light, But the most frequent of all causes is direct violence to the head which then leaves it under the consideration of a surgeon we have said that violent emotions of the mind produce this disease, but it is only those passions of a stimulating that can give rise to phrenetis, such as joy and anger but grief and fear are debilitating passions which cannot produce this disease —

The symptomatic variety of phrenetis is produced by the following causes. Biliary calculi. Metastasis of cynanche Parotidea frequently ~~produce~~ to the brain and of Paraga frequently produce in worms in the alimentary canal sometimes produces acute inflamation of the

symtomatic kind but more frequently they give rise to Hydrocephalus internus. Hydrophobia sometimes produces this disease and sometimes it is also produced by the various kinds of exanthema and not unfrequently Phrenitis of the symtomatic variety is produced by or other accompanying yellow Bilious remitent and Intermitent fevers - - -

Having thus considered the various causes which produce and the symptoms that accompany this disease which by the by is more formidable in its character than frequent in its appearance we will next proceed to consider the meth of treatment by which we can render it less fatal in its consequences. In the treatment of every disease we should be to a certain degree regulated by the causes which produces it and the symptoms that attend it. Phrenitis is a disease of so much morbid excitement as to require blood to be

when in large quantities and after repeated, the quantity and quality of the blood drawn should not be regarded but we should persevere in the use of this most valuable of remedies until the general inflamatory diathesis is subdued it is necessary that the patient should be kept in a dark and cool room, for heat and light always agravates the symptoms and increase the disease. As a valuable auxillary to the lancet the purgative ~~the~~ ~~gold~~ neutral salts should be employed together with cooling laxatives clysters cold wet cloths and Ice pounded up and put into a bladder should be constantly kept applied to the head. the application of clay caps was a remedy employed in the practice of Galen

The cold bath is a very excellent remedy for reducing the morbid temperature of the body and at the same time diminishing the action of the heart and arteries the super tartrate of potash has been very highly

recommended in this disease and no doubt is very valuable remedy, the frequent use of antimonial powders is valuable after the lancet has been premised this remedy when properly exhibited seems to reduce the morbid arterial excitement and thereby facilitates the cure. but the tartar emetic which enters into the composition of these powders should not be given to such an extent as to excite vomiting for this effect will invariable have a tendency to augment the disease, to apply a blister to the head and back of the neck in this disease before the inflomatory diathesis is subdued would be attended with fatal consequences as much so as the passage of an ounce ball through the brain and any judicious physician has as clear let his patient be shot as with a rifle as to submit to the application of a blister in this stage of the disease and the effec

cation of a blister even after the general inflamatory diathesis is subdued is not admissible remedy for although it might now be productive of an ill consequence yet it would interfere with other remedies which would be productive of beneficial effects after general inflamatory action is subdued by the use of general bloodletting. the application of leeches and cups should be resorted to particularly if any local symptoms be lurking behind and local disease is the result of the operation of Miasmata which is very frequently in marshy and the use of mercury both internal and external may. it is the only remedy on which we can in any degree of safety rely after the use of the lancet These are the principal remedies on which we can in the treatment of acute Phrenitis having thus stated the premises these few remarks. we now conclude submitting them to the impartial judgement and scrutinity of the profession A. S. Reems

An

Inaugural Dissertation.

on

Dysentery.

Submitted to the Provost, Trustees, and the Medical Faculty of the University of Maryland, on the 1st day of March 1831: for the degree of Doctor of Medicine. By Benson B. Hall, of Prince George's County, Maryland.

To

Nathaniel Potter, M. D.

Professor of the Theory and Practice of Medicine in the University of Maryland.

This Inaugural dissertation is inscribed as a feeble testimony of the high regard and consideration that is entertained of his professional acquirements by the

Author

A Dissertation on Dysentery.

Medical authorities have long since differed in sentiment, in relation to the contagious nature of Dysentery — The remarks and observations that have been advanced on both sides of the question are certainly of the highest consideration, when we reflect upon the sources from which they have emanated; and should be examined into with attentive care and scrutinizing observation before a conclusive opinion is formed upon the subject — The earlier nosologists seem to have laid little or no stress on the contagious character of the disease; while subsequent ones, contend that it is contagious — Among the former are the names of Bogel, Linnæus, Sagar, Sauvages, Macbride; and the latter is Cullen, Young, and Parr — It is an opinion, however, that is advanced and

supported with no inconsiderable degree of inter=
=est by some of our American writers, that dyse=
=nlery never prevails as a contagious disease;
but is an affection that invariably makes its
appearance in the character of an epidem=
=ic — Whatever may be the circumstances, that
are connected with the occurrence of this
distressing malady, as having claimed the
notice of European physicians, it may
perhaps, with no small share of correc=
=tness be remarked that no concurrent
combination of circumstances developes
themselves in relation to the disease as it
appears in this country, that are calculated
to impress upon the mind the idea of
contagion being in any way interwoven
with its developement, or connected with
its occurrence — dysentery, is no more propa=
=gated from the sick to the well than yellow=
=fever; but like this disease it prevails as an
epidemic spreading rapidly from a com=

=mor origin – How common is the occurrence of only a solitary individual in a large family having the disease; when not one of the attendants, or any of those who visit the subject of this malady seem to be affected in the least degree, from thus being exposed to the effluvium emanating from the body and head? How frequently do we witness only one here and there in a family within the limits of a considerable extent of country that is affected with dysentery? Then, if the disease be contagious, would it not be reasonable to infer, that it would more frequently than it does extend its influence to only a solitary case here and there through the medium particularly of the attendants and visitors? There is one fact that may be considered sufficient to put this idea at defiance – that is, that it seems to be a law of the animal economy, that no contagious disease accompanied with general

febrile excitement can be received in the system more than once — Now it is a well known fact, that a person may in a life time have frequent attacks of this affection, and in every instance too, the intestinal derangement will be connected with more or less febrile action. Then in accordance with the established law of the animal economy as just noticed, Dysentery cannot be considered as being contagious without a violation of this established law —

"This disease especially occurs in summer and autumn, at the "same time with autumnal intermittent and "remittent fevers; and with these it is sometimes "combined or complicated". It is very incidental to armies, when, after or during warm weather, they are long exposed to heavy rains or lie in low swampy grounds.

In this disease the patient "has frequent "stools accompanied with much griping, "and followed by tenesmus. The stools thus

"frequent, are generally in small quantities; and
"the matter voided is chiefly mucus, sometimes
"mixed with blood. At the same time the
"natural faces seldom appear, and when
"they do, it is generally in a compact or hard-
"ened form. The disease sometimes comes
"on with cold shiverings; and other symp-
"toms of pyrexia: but more commonly
"the symptoms of the topical affection
"appear first. The belly is costive, with
"an unusual flatulence in the bowels.
"In most cases the disease begins with
"griping, and a frequent inclination to
"to go to stool. In indulging this, little is
"voided; but some tenesmus attends it.
"By degrees, the stools become more frequent,
"the griping more severe, and the tenesmus
"more considerable. Along with these symp-
"toms there is a loss of appetite; and frequently
"sickness, nausea, and vomiting also affecting
"the patient. At the same time there is always

"more or less hyperæmia present, which is some-
"times of the remittent kind, and observes a
"tertian type. Sometimes the fever is ma-
"nifestly inflammatory", and again of a
typhoid kind. "These febrile states continue
"to accompany the disease during its whole
"course, especially when it terminates com-
"in a fatal manner. In other cases the
"febrile state almost entirely disappears,
"while the proper dysenteric symptoms
"remain for a long time after – In the
course of the disease, the matter voided by
stool is very different – The matter is
sometimes mucus, and at others it is
mixed with blood in greater or less quanti-
-ties. On some occasions a pure and un-
-mixed blood – In other respects the matter
voided is variously changed in colour
and consistence and is commonly of a
strong and fœtid odour – It is probable
that a genuine pus is voided, and frequently
a putrid sanies proceeding from gangrenous

parts - These are very often mixed with the liquid matter some films of a membranous appearance, and frequently some small masses of sebaceous matter -

While the stools consisting of these various matters are, in many instances exceedingly frequent, it is seldom that natural faces appear in them; and when they do appear it is in the form of scybala, that is somewhat hardened balls - When these are dislodged from the bowels, either by nature, or by the operation of cathartics, they procure a remission of all the symptoms, and more especially of the frequent stools, griping and tenesmus -

Accompanied with these circumstances the disease proceeds for a longer or shorter period - When the fever assumes an inflammatory type; or that of a typhus character more particularly; it often terminates in a few days fatally, with all the marks of supervening gangrene.

When the febrile state is more moderate, or disappears altogether, the disease is often prolonged for weeks, and occasionally for months; but even then, after a various duration, it often terminates fatally, and generally in consequence of a return and considerable aggravation of the inflammatory and typhoid types — In some cases the disease ceases spontaneously; the frequency of the stools, the griping and tenesmus, gradually diminish, while natural stools return, In other cases the disease with moderate symptoms continues long, and ends in diarrhœa.

The remote causes of this disease have been variously judged of. The atmospheric temperaments ~~chiefly~~ chiefly calculated to produce severe bowel complaints, are those of summer and autumn; when the liver is excited to a larger secretion, of perhaps more pungent bile, from the greater heat of the weather; the skin

is exposed to more sudden transitions, from free to checked perspiration; and the exhalations that arise so abundantly from marshes and other swamps, too often give an epidemic character to the atmosphere and lay a foundation for intermitting and remitting fevers — We have here sufficient ground for local and general affection, and may readily see how it is possible, from the operation of one of these causes singly, or of two or all of them jointly on an irritable state of the intestines, for all or any of the local symptoms to be produced which enter into a generic, or specific definition of the disease under consideration — It is nevertheless very difficult to say what are the precise causes, that operating locally produce the distinctive symptoms of dysentery rather than those of diarrhoea, cholera, or any other irritation or spasmodic action of the intestinal canal —

As relates to the curative plan of treatment to be adopted for the removal of dysentery, it should vary according to circumstances. If the inflammatory symptoms be high, and the patient be plethoric and vigorous; and sometimes even independantly of the existence of this latter condition - bloodletting is essential; and the operation must be repeated as often as circumstances require — The early exhibition of an emetic, either accompanied, or speedily followed by a cathartic, is, in most cases of importance - Besides discharging from the stomach such matters, as might be morbidly irritating, the operation of the emetic aids in resolving the spasm of the intestines, and in affecting a free evacuation of their contents — Perhaps the best emetic, is the antimonium Tartrigatum - and as a cathartic to succeed its exhibition is the ol. Ricini; or the Pulph: Jalapa, Rochell or

Epsom salts - Should the oily and saline purgatives fail in producing the necessary evacuating effects; Calomel and jalap, jalap and cream of tartar, or a strong solution of Glauber salts combined with a strong decoction of senna will be found highly efficacious and useful — Large doses of calomel, it is said, combined with opium, and occasionally repeated, sometimes succeed in procuring a passage when other things have failed. The operation of cathartics may be greatly facilitated by the administration of injections, the most powerful of which consists of fifteen grains of tartarized antimony, dissolved in three gills of tepid water, with the addition of three table spoonfuls of sweet oil. When the febrile symptoms have been pretty well subdued the administration of opiates will be found useful in allaying the severity of the pain —

After the bowels have been sufficiently evacuated, an excellent remedy to allay irritation and tenesmus, is an injection, composed of from half a hint, to three gills of melted butter, free from salt - This may be repeated every three or four hours, or oftener if circumstances render it necessary — The butter should be perfectly free from rancidity, otherwise it will be liable to excite considerable irritation — If the pain continue obstinate and the abdomen tu=mefied, hard and sore to the touch, in addi=tion to fomentations and anodyne lini=ments, the application of cups, or leeches and blisters to it will be found highly be=neficial —

In every case where the disease is likely to assume a chronic form, particularly if the liver is somewhat concerned in the the dysenteric affection, a gentle mercurial tyalism will have a happy effect — On various occasions throughout the disease mucilaginous injections may be advan=

=taneously resorted to, in order to quiet irritation and allay tenesmus — They may consist of a solution of gum arabic, or decoction of starch, barley water or flax-seed tea —
The drink in the different stages of the disease should be likewise mucilaginous, diluting, and mild —
When dysentery degenerates into a chronic state a grain or two of Ipecacuanha with the fourth of a grain of opium may be given several times a day, to suspend irritation and determine to the surface — An infusion of Colombo, of Chamomile, or gentian will be found useful —

An
Inaugural Dissertation
on the
Principal of Life & action of the Heart.
Submitted to the
inspection of the
Provost and Medical Faculty
of the
University of Maryland
for
a Degree of Doctor of Medicine
By
John. T. Mitchell
Maryland.

The subject I am now about to undertake is one so fraught with the mysteries of the human oeconomy, that I feel conscious that the justice due will not be rendered, I think it almost folly in one so unskilled in the phenomina of physiology to speculate on such hidden mysteries, I am aware that I am wandering in the midst of darkness, I feel as though I were approaching the inhospitable coast of syrens, led on by the melodious strains of music, every thing seems propitious to a safe and happy welcome but alas these charms that seem about to lure you to an Eden of felicity where nature seems to have her stores of treasure holds but the forbidden fruit and the detested serpent offering the glittering fruit and portraying to the delighted fancy the numerous blessings that would be entailed upon the tempted, let me like the wise Ulysses shut mine ears against the syrens whose wish is to lull me into the sleep of destruction, and let me like Eneas prefer my own safety to the luxurious embraces of a Dido

though the cruel persecution of an unrelenting Juno
shatter my fleet, I may yet land upon a rock
of firm basis, may a mentor ever attend and
guide and govern me in my undertaking, and
when I am about to approach the island of Ca-
lipso may he turn me from disgrace, It is
with caution that I can launch my frail Bag.
on upon this perilous ocean infested with quick
sands and breakers, but these obstacles must not be
as barriers to my designs, I wish to examine this
complicated fabric of human nature, my desire
to find out the of the human oeconomy
is great.

My first enquiry is what is life and 2ndly
what is the great machineric of the blood moves
and thirdly and lastly what causes it to contract and
relax so uniformly through a course of long and
singular life, when we look around us and
behold the works of nature we can but admire the
goodness of divine Providence, first on the list we
behold man made after Gods own image endowed with
reason and understanding, sovereign lord and master

Note the 1st

Life is the first principle in nature, it exists in various degrees of energy, in the egg and the seeds of plants and requires the necessary stimulous, to bring it to its full developement —

of the Animal and Vegetable Kingdom, next beasts birds fish trees &c, all endowed with that principle called life, but man the only creature gifted with speach and Reason alone is conscious of existence, he knows that he feels sees speaks and hears, in fine he knows that he lives, and he knows that there is principle called life, how does he know it, he knows it because the Deity has bestowed upon him a knowledge of future events, he is an accountable being, he has denied all this to the beasts of the field and trees of the forest they are for the use of man and after death there is no more of them, to the beasts he has given feeling seeing tasting and the principle of life, but denied to them the knowledge of it, to the trees he has given neither, but life, ~~can know~~ that they have this principle just deprive them of their covering, their foliage once beautiful become dried and withered, a proof that its vitality is gone, but from what part it ~~animates~~ we cannot tell, each one has his opinion and I have mine, it is only from analogy and observation, we reason, we know that some parts possess this principle in a greater degree

Note 2nd

We have stated that the manifestations of the principle throughout the vegetable and animal kingdoms present considerable difference in degree. Its character in the vegetable creation is more uniform and its phenomena more simple.

than other parts mean the source of circulation for instance the fingers and toes are more apt to mortify than any other parts, because there is an insufficiency of vitality to keep up the warmth of the parts. we are told that every part endowed with sensibility is plentifully supplied with nerves, we cannot pick any part. but it feels and contracts more or less then it is the nerves that give sensibility and contractility but there must be a something to give them this power therefore it cannot rest solely in them, ~~in this~~ power must be the principle of life, now the question is from whence proceeds this principle; does it proceed from the blood? I can not agree with Mr. Hunter I will quote a passage from the above author, but first I will give my opinion I have endeavoured to explain in the first place the phenomena of life, it is said that the blood affords the stimulous necessary to motion* every part possesses life, life then is essentially necessary to motion, I believe that the heart contains this principle in a greater degree than any other part it distributes its vivifying influence to the remotest parts through the medium of the circulation

Note 3rd

Richerand page 128

(The action of the heart does
not depend on the excitement of the blood on its par-
ticles since ~~from~~ the heart after it has been torn fro
the body of a living animal palpitates its cavities
tract and dilate though quite emptied of blood, app
agitated by alternate motions, which become faster as the
part gets cold.

If you attempt to check the diastole of the heart this o
resists the hand and its cavities appear endowed with
a power which Galen termed pulsific; in virtue
which they dilate to receive the blood, and not bec
they receive it

stop the circulation or drain us of that fluid and we perish the heart stills its motion, not because the life of the blood is destroyed, but because the agent through which life is furnished is cut off, let us for instance suppose a case, we wilo drain a mill race of its water, the mill becomes useless for a time, because the source of impulse is lost. it is as useful as ever if the damage is repaired so would it be with man if we could restore blood to its accustomed channel time enough to rekindle the remaining spark of vitality, we have seen the hearts of animals taken from them and washed clean of every drop of blood and still that heart evinced signs of life, what could be the fate of man if the heart depended upon the blood for life and motion; every inordinate flow of blood to that organ would be attended with the most consequences, such acted with the vital principle it would be subject to the most violent and irregular motions, threatening suffocation and even death, it must be guarded with a principle to protect it from such ravages

and this must be life, the heart has the power of distributing its blood through the body to convey this principle to other parts, to keep up the uniform temperature of the body, to search out the weak and decayed parts and repair their losses this is the principle use of the blood, we know that heat is generated in the lungs by a process called respiration, it is conveyed through the whole system through the medium of the blood, it is owing to this fluid that the atmospheric air is enabled to part with its oxygen or in other words its caloric principle and by so doing disengages the carbon of the blood which is thrown out in expiration and gives it its nutricious principle, * the blood has the power of preserving its fluidity, or in other words the living principle in the body has this power of preserving it in this state, there is a contradiction in Mr. Sculers theory, he endeavours to prove that the blood alone is the only part in the animal oeconomy, capable of imparting this principle to the other parts, and in another part of the same sentence he speaks of holding principle of the body,

Hunter Page 85

I would ask in what part is this principle under
the animal frame composed of a compound heterogen
eous mass, of bones muscles tendons nerves &c, each
dependent on the other for its support, the blood
receiving its oxygenation and warmth from the
combined efforts of the lungs and atmosphere
the nerves divided into voluntary and involuntary
nerves, and the muscles dependent on them for
their motion, and again the voluntary nerves
subservient to their will, & it is only necessary that
we will them to a certain action and they
obey, But there are others again not controlled
by the will, such as those of respiration and
others concerned in the functions immediately
necessary to life, I have asked in what part
does this principle reside and I think it
necessary to give an opinion in what parti
cular organ seems to reside this principle, and
my reasons for such an opinion, I have said
that the body was composed of a heterogeneous
mass, or in other words parts dissimilar in their

~~I would ask in what part is this principle~~
constituent principles and office and each in
capable of conveying its allotted function without
the other if one be taken from the whole the rem
aining part must be useless, in—
The heart to me seems indeed more possessed
of this principle than any other organ in the
body, my reasons I have given in a preceding
page, however I will adduce others in support
of my opinion, each organ has its office
but all look to the heart for support and
animation, The heart is as a faithful Monarch
having a great many petty states subordinate
to his will and to whom they all look in the
hour of danger and necessity for succour
and support, and in like manner they contri
bute to his wealfare, all uniting to ~~expel~~ the
invading foe, But when the ruthless Victors
seize their Monarch and drag him from his
throne, the petty states loose their succour and

are overcome, so is it with the heart when a linger-
ing disease feeds upon its Vital power Nature
no longer able to bear up under a load of
excruciating torment, and the other impaired in their
functions are unable to furnish it that ~~[illegible]~~
~~any~~ stimulous necessary to its support, it sinks
having lost the principle, which alone caused it
to act. I cannot believe with a modern writer* speak-
ing of the modus operandi of medicine that the
stomach is the seat of the Vital principle although
it has a great influence upon health or disease
it is the principle organ where all the nutricious
principles are mostly seperated for the physi-
cal power of man, nor can I believe as he
does that in languido centriculo omnia languent
may not the duodenum perform this function when
the stomach is out of order, do we not find
the gastric juice here as well as the stomach,
is not this the place where the aliment meets with
the pancreatic and biliary secretions and it is
here we find principally the great lymphatics when
a lingering disease puts a period to our existence

Chapman page 95

Conveniently situated ~~the stomach~~ for the purpose, the stomach is probably the seat of the vital principle, from which would seem to emanate an influence that, diffused over the system, preserves as I have already mentioned, the order of the parts, sustains the vigour, tone, and well being of the animal economy.

the vital spark slowly leaves the extremities and
enters itself in the heart. if the stomach is its abo
de why do we not find it first and last here
if the blood why not the same, the reason is evi
dent. the heart is the first part of our organ
ized being sum to mon primum vivens and
as it increases in the same ratio does it dess
minate this principle to the surrounding parts
and in like manner receives aid from them,
omnibus dat ab omnibus accipit and it is the
last to cling to this principle ultimum moriens
it may be said however that when by sudden
death as by lightning the heart is the first to loose
this principle, and the muscles and other parts
last to retain it why does this happen if
the heart is the heart is the seat of life; my an
swer to this is that as here is the vital prin
ciple here the shock is most sensibly felt and
as by nature we came into the world gradually
so in the same ratio it was intended we should
make our exit

Richerand page 87

The duodenum may be considered a second stomach; very distinct from the other small in by its situation, exterior to the peritoneum by its size, and readiness of dilatation, the size and regularity of its cavi

An Inaugural Essay on Cynanche Trachealis

Submitted to the Examination of Roger B. Taney Esq.r Provost

The Trustees and Medical Faculty of the

University of Maryland

For the Degree of

Doctor of Medicine

by

1830

WILLIAM F. KNOX of Maryland.

To

Doctor John Pinkerton Mackenzie

of Baltimore

This Thesis is respectfully dedicated, as a memorial of my esteem for his virtues, and gratitude for the many kindnesses he has bestowed upon him.

Humble Servant

William F. Knott.

In accordance with the custom of this Institution, we proceed to treat of some subject, as a Dissertation, which task, we undertake with the utmost diffidence, knowing our incompetency to the fulfilment of a duty, which should devolve along on the aged and experienced. And should we not succeed in the accurate description and treatment of the disease, which we have chosen, we would offer as an apology, the want of practical experience. And with these remarks we shall proceed to speak of:

Cynanche Trachealis.

The description of this disease by Dr. Fullen is very accurate, and few have given a more satisfactory History of Croup, than that learned and celebrated author. The various named authors have affixed to this disease, serve more to complex, and confound, than to assist in throwing any practical light on the character, or treatment of this disease. It has received by Dr. Rand the name of Suffocatio Stridula. Dr. Good treats of it under the name of Bronchitis. The name of Hives has been given it in Pennsylvania, supposed to be a corruption of the

Hearse, from the violent action of the Diaphragm, and abdominal muscles in breathing. And hence the more vulgar name of Bowel Hearse, which denotes the worst stage of this action. Dr. Darwin considered it a Pleurisy of the Trachea. And various other names, as Morbus Strangulatorius, Trachetis &c. &c. We shall choose the name that we have affixed, because, by that it has been most generally described, and by which it has most commonly been known.

— Cynanche Trachealis is a disease then, that most commonly affects children, after they have been weaned, and unfrequently after they have attained the age of twelve years. When it has once attacked, it leaves behind a predisposition, which the subject will gradually get rid of, as he grows older; and sometimes this predisposition never leaves the patient, not even after he has attained a great age. There will also be a tendency to this disease kept up, by all the causes acting, and debilitating those parts which are subject to its ravages. Thus, it will often accompany, or succeed Measles, Small Pox, Scarlet Fever, and Aphthous Sore Throat, and often make its appearance in Autumn, when Marsh Effluvia has been acting, and has debilitated the System. Authors have mistaken the Pathology of this disease some thinking it to be a Spasmodic, some a nervous, and others an inflamatory affection, which they consider acute, and sometimes chronic,

which state we shall notice when we speak of the treatment, and cure of the disease. It is now believed to be an inflamatory affection of the Trachea, (the mucus membrane) extending itself occasionally down, and affecting the Bronchia, and air cells of the Lungs, and sometimes extending up to the Larynx, and affecting the laryngeal muscles, in which extended range, Dr. Ford seems properly to have named it. It prevails mostly in changeable latitudes, particularly when cold is followed, or accompanied with dampness, and moisture. In some mild forms it is attended with no fever, and may be correctly called an Idiopathic affection. It is sometimes preceded, for two or three days, by a slight sore throat, and may be easily cured at this crisis by an Emetic; and in the forming stage of this disease, which may be easily recognized by a hoarseness, slight cough, and stertorious breathing, a gentle emetic, assisted by the warm-bath, (which last is inadmissible in its inflamatory stage,) will often subvert the disease, and entirely overcome it. When it is preceded by a chill, it is commonly very inflamatory, and will require active remedies, and it usually attacks suddenly. It generally runs its course in two, or three days, but sometimes is protracted in a chronic form for eight, or ten days.

The process of the inflamation on the mucus membrane of the

Trachea, before alluded to, (appears to have been noticed by Dr. Hood, who first called the attention of the Proffession, to it,) during which, a peculiar effusion is secreted, that readily assumes, the membranous like form, and lines the Trachea, and Bronchia, and obstructs the passage of the air, to the cells of the Lungs, and often produces suffocation, strangulation and death. This membrane is sometimes discharged, and has been called by Dr. Mechilis, Angena Polaposa. This secretion appears to be composed of Gluten, detected with the serosity of the blood, and Fibrin, concerning which, it is in our power to say but little. Nor do we know, why this membranous secretion, is thrown out on this occasion, and we would not advance an opinion in regard to it, lest we might be thought impertinent, and presumptious, since we could not expect to remove that veil of obscurity that now covers it, and since members of the proffession, who have supposed, the golden knowledge of the present, and are versed in all the writings of the ancient geniuses, have modestly refused to enter that labyrinth of obscurity, in which, they would be compelled to wander in, darkness and despair, lost in conjecture and confusion.

It would not be amiss now to speak of the appearances on Dissection. And first a slight degree of inflam-

-ation extending itself through the Trachea, a thick matter resembling mucus, and lastly the membranous-like secretion, of which we have spoken, formed from the coagulable lymph of the Blood. The Trachea it is said, in some cases, puts on no appearance of inflamation; and these cases generally terminate suddenly, and fatally, owing to morbid excitement transcending inflamation, and producing death. Similar appearances of the absence of inflamation is sometimes observed in different parts of the system.

We must now speak of the symptoms of this disease, which have been accurately described by every Author who has written on it.

Symptoms.

This disease usually commences with a slight cough, and sneezing, as though the patient had caught cold, and was about to labour under that troublesome disease. After these have advanced one or two days, the patients voice is affected with a shrillness, and hissing peculiar to this disease. The sound assimilates to that, which is produced on introducing air through a brazen tube; at the same time observes Dr. Cullen, there is a sense of pain, and stiffness about the Larynx, some difficulty in respiration, and a wheezing sound

in inspiration, an inability to swallow, the voice appears as if straightened, the cough that attends is dry, but sometimes there is matter spit up, of a purulent appearance, blended with films of a membranous appearance. There is a frequency of the pulse, and a sensation of heat, and restlessness. On viewing the internal fauces, they present a red aspect, and are swollen, and sometimes covered with a mucus matter. There is at this crisis a great difficulty of breathing, with suffocation, which sometimes cuts short the patients sufferings, and with these symptoms we may add, that the countenance exhibits great distress, the head and face are covered with a perspiration, the lips and cheeks are alternately livid and pale.

With this description of the symptoms, we shall proceed to speak of the practical part of the disease, and to notice briefly the application of the remedies that have subverted, and again set at liberty the unfortunate victim of this formidable malady. And we trust that we may be as fortunate in rightly describing them, as they have proved under favourable circumstances in conquering the disease.

forward

Treatment.

The cure of this disease depends, not so much, on searching into the remote cause, and directing thereto our treatment, but by the direct application of such remedies, as may overcome the mischief already created, and the discharge of that secretion, which threatens to produce sudden suffocation, and death. And for this purpose we would speak first of — Bloodletting, which remedy, we always look to, in all the forms of inflamation, and which if we consider its inestimable utility in this, as well, as in other inflamatory affections, we would not hesitate to place it, as the greatest auxiliary, that the Medical Practitioner is in possession of. This remedy copiously used in the forming stage of this disease, seldom requires any assistant, but will safely, and speedily put a period to its existance. When the pulse is hard or tense, as it sometimes is, and the patient bears the loss of a quantity of blood, we seldom see the disease protracted, but most commonly a speedy and safe recovery, which in itself is enough to recommend the remedy, as the first, and most to be depended on. This and other remedies, as a mild cathartic, or gentle Emetic to discharge the phlegm that prevents the easy passage of the air to the Lungs, is a common practice of the

present day. There is said to be a preferable way to bleed, viz through the Jugular vein, but I know not that it is preferable. We also derive great advantage from topical Bloodletting. Calomel given in large, and repeated doses, is a remedy of great service, and will often cure when all other remedies have failed, even when the Physician has been waiting, with the expectation of seeing his patient removed from him by Death. This remedy should be given until there is a discharge of green bilious matter, which appears to be the criterion, by which we are to judge, of its salutary effect. This remedy is thought to have a specific effect on the disease under consideration, but I suppose not. There need be no fear of exciting Ptyalism, as the remedy acts as a good Cathartic. Emetics have been spoken very highly of, in this affection, and indeed they appear to be indispensable. When we see our patient in the greatest anxiety, and labouring hard, that he may obtain his breath, and in danger of instantaneous suffocation, our first resort would be an Emetic, which might vomit him, and discharge the phlegm that threatens his immediate death. This remedy would also lessen the action of the heart and arteries, and act beneficially in that way. The Warm Bath, and Fumigations, have also been used in this disease, but are inadmissable, where inflamatory symptoms run

high. Dr. Archer has recommended, exceedingly high, the Snake Root, but this remedy does not appear to possess the great qualities which, that gentleman wishes to attach to it, and appears to be falling into disuse.

Blisters in this disease have been highly recommended, and are in certain states of the disease, of undoubted efficacy. In, the chronic, or protracted form of this affection, their use is unquestionable. Applied to the Throat, Breast and neck, they cannot fail to prove of wonderful advantage; and assisted by gentle, and mild Diaphoretics, in this stage of the disease, they cannot fail, speedily, to restore the patient to his usual good health.

Towards the close of the disease, after the symptoms of great morbid action begin to decline, a few drops of Vinct. Opii, by quieting the cough which generally succeeds it, often produces the most salutary effect, with some mild Wear. &c. &c.

A few words as to the Prognosis, before we conclude. The disease is most dangerous, when there is a constant, and audible stertorious breathing, and less when a dry stertorious cough attends, with easy respiration. And where there is a free expectoration of mucus, the danger is nearly over. An eruption of red blotches, which appear, and disappear

two, or three times during the disease, is always favourable.

We must now leave this subject, hoping that we have said enough, not only to satisfy, but to conquer the disease, met with in any form; and that we may, as has always been the case with the Alumni of the University of Maryland, strictly adhere to what she has taught, and that she may continue to rejoice in her present, and well earned glory is the sincere wish of her

Grateful Servant,

March 19th 1830.

William H. Knott.

On Necrosis.—

A Dissertation

Submitted For Examination.

To The
Provost, Trustees,
And
Faculty of Physic,
Of The
University of Maryland.

By

HOWARD KENNEDY.
OF
MARYLAND.

1828

To

Nathan R. Smith M.D.

Professor of

Surgery, in the University of Maryland.

Sir

In dedicating to you, this imperfect attempt to promulgate the doctrine taught by your esteemed Father, my object is, to testify the sense I entertain of your invaluable services, your zeal, and the success which has attended your exertions in your official capacity. And at the same time, to express the high degree of respect and esteem

Of Your

Friend

And pupil

Howard Kennedy.

Necrosis.-

Necrosis denotes the entire death of a bone; this however is not the necessary termination of the disease, although its is without doubt the most frequente.-

It was formerly denominated Fever Sore in consequence of its being always attended with constitutional irratation and symptomatic fever.-

Necrosis may be partial or total- It may extend through the entire body of the bone, or it may only affect the superficial lamella- The flat and spongy bones are very seldom affected by this disease- It usually attacks the cylindrical and long bones the tibia, fibula, femur- inferior maxillary &c.- The body of bone is the most frequently attacked, in consequence of its being more compact, less porous, and of course indued with less vitality- The epiphysis is generally the boundary line, the articulation being affected in the first instance although it may be secondarily. Necrosis differs from caries as gangreene does from ulceration; in necrosis the bone is dead and the absorbents detach it; in caries there is action, and the absorbents remove the bone which is diseased.-

Necrosis almost always commences with an acute pain and inflamation, which is generally referred to some one of the contiguous joints, in a day or two however the pain and inflamation becomes evident in the part which is to be the seat of the disease- There is a red and discolouration of the skin, also a hardness of the parts, the inflaction not being so evident until the matter escapes from beneath the periosteum- in the progress of the disease-

here is always more or less constitutional derangement - The pulse is celerated, small and contracted - The face is pale, and often mul-ed with a hectic flush - The tongue is often furred, with other mptoms indicative of a derangement of the digestive organs. -
f the disease progress, the parts will begin, about the fourth or fth day, to assume the appearance of suppuration - Matter l be deposited between the external periosteum and the bone, s also about the same time matter will be formed between the ternal surface and the lining membrane or internal periosteum nd thus we shall have matter situated on either portion of bone - This fact has been remarked by Professor Smith of le - in repeated instances, and should be remembered, as it s lead to a correct pathology and treatment of this disease ich has been taught and practiced by this eminent Surgeon th success - to whom we are indebted, virtually for a very larg tion of the principles and practice adopted in this treatise - fter some time the matter will escape from beneath the exter- l periosteum, and become effused through the soft parts, when tumefaction will become quite evident; finally the matter ll reach the external surface, when fistulous openings will formed from which will be discharged a foetid sanious atter - The severity of the symptoms will then moderate parts in time will assume the chronic state, from which un-lthy granulations often arise - The fistulous openings will come established, and will generally be continuous with ices formed on the bone, for transmitting the matter d portions of the mouldering bone from the internal cavity

hen this disease attacks the spongy bones, which is seldom the case
matter forms on both sides of the external lamella, which covers
cells, differing from the long bones, by the matter being
osited in them between the medullary substance and the walls
he bone.—
e pathology of this disease has been little understood. The
ory adopted by Professor Smith is perhaps the most satisfactory
existing, it was formed upon observation and experience
can perhaps only do him justice by giving it in his own
ds.— He remarks, that "The death of a portion of bone in this
ase, does not appear to arise from any extraordinary vio-
ity in the inflamation, nor from its exerting any lethiferous
luence upon the part affected, as some specific diseases des-
the parts they attack. Abundant cause for the death of
hart is found in the insculation of the bone, affected, by
accumulation of matter on both sides of its parietes, and
consequent destruction of those vessels which from the two peri-
e furnish it with blood and nutrition, so that the denuded
tion receives no vessels, but those attenuated ones, which
mcate it from the surrounding margin of the healthy
es. These last being insufficient for its nutrition it con-
quently perishes.—
ture then sets up a process of ulceration for the separa-
of the dead portion, and the evacuation of the mat
contained with in it, this occupying a greater or less
e, as influenced by circumstances.—
dead and insulated bone, from its indestructible nature

-ains as a foreign body in the living parts, until by the re-
-herative efforts of nature, it is dislodged entire, and rejected
-m the system; or being constantly bathed in the secretions
-ch protect the surrounding parts from its contact, is grad
-lly deposed and wasted away, or finally is removed
parts."—

e formation of the new bone to supply the place of that which
-leased, is an interesting example of the operation of the ani-
-l economy for the restoration of parts which have been destroyed
disease— The formation of this new bone has for a con-
-erable time attracted the attention of pathologists— Some
-tend that it is generated independent of the old
one and periosteum, while others insist that it is formed
the periosteum— They say that the periosteum and its ad
-ring cellular membrane, becomes vascular, that the
-hely of the periosteum becomes enlarged— That it is but
-ely adherent to the bone— That lymph is deposited which
comes consolidated with the periosteum; that these
-ngs take place before the removal and even pre
-cursory to the death of the bone. That as the bone is absorbed
-cous particles are secreted— That after a time this
-w bone becomes solid, thereby differing from the
-inal bone which always is constituted with a vacuity
which the medullary substance is lodged— and that
condensed cellular substance, supplies the place
-e periosteum to this new formed bone—

-ither from our own knowledge, nor from the informa-

on we have obtained from writers on this subject, do we
ls ourselves competent or qualified to decide on the mer
or preference of either of these two theories - Fortunately
ever a positive decision on this question is not absolutely
lled for, or very material in a practical point of view —
After the fistulous openings are formed, this disease may
rminate in two ways - either by the sequestrum becoming
mpletely enclosed and retained with in the cavity of
new formed bone - which would occasion but lit
inconvenience The parts would remain enlarged
d indurated - This is the most favourable manner in
hich this disease can terminate, although it ~~is~~ seldom
ppens, that this is the termination of it; - Or it may ter
minate by the sequestrum being seperated from the
ne and discharged in peices from the openings, or
moved by an operation, which will hereafter be men-
ned —
is disease is almost invariably confined to young persons
tween the ages of nine and twenty five - It perhaps never
curs in old persons. —
he period of cure is governed by contingent circum
ances - The medium time we believe is between one
nd three years, but very often it is continued for a
ch longer time - the exostosis of the lower jaw has been
ld to be cured in three months —
is disease may occur in different parts of the system at the
me time, it commonly, however occurs necessarily -

although the patient suffers a protracted confinement this disease, nevertheless it is not fatal in a majority of cases - Some cases however have terminated fatally from an extreme degree of constitutional irritation and symptomatic fever -

Necrosis is distinguished from rheumatism by the symptomatic fever occurring sooner after the local attack. By the pulse being harder, smaller and less compressible. and finally by its terminating in suppuration which is seldom the case in rheumatism.

Causes of Necrosis. We may perhaps say with propriety, that the remote cause of this disease is not known, it must doubtless be something which produces a debility of the capillaries - It has been referred by some to a scrophulous diathesis, it may evidently occur in a habit of this kind, but we cannot suppose that it is exclusively confined to this diathesis. - It may with as much propriety be referred to a peculiar diathesis - a diathesis sui generis, which is only an acknowlegement of our ignorance, of its remote causes.

The exciting causes are numerous - It has been excited by blows or violence inflicted on the limbs - By sudden suppressed perspiration - By cold bathing when the body was warm - From pressure of the ligature in venesection, it has been produced - By specific diseases, as syphilis, scurvy &c also it has also supervened without any obvious exciting cause whatever -

Treatment. It has been supposed by some, that if energetic advice were resorted to in the incipient stage of this disease

termination in suppuration could often be prevented. In all
bability this practice will never succeed, it may however, if
proved of be tried. Bleeding locally and generally. cathartics
blisters. counter irritants &c.—
rofessor Smith from his theory of the pathology of this disease
received and adopted principles of practice which have proved
nently successful, and which we beg leave to adopt, as
ing, in our humble opinion, the most judicious plan of treatment
th which we are acquainted.—
the Surgeon is so fortunate as to be called, in the incipient
ge of the disease, as soon as the seat of the affection is suf-
ciently ascertained by pain and inflamation, a longitudinal
cision should be made through the soft parts and periosteum
wn to the bone, extending as far as the inflamation does.—
e wound is then to be dressed as a simple incised wound
ith that we should not close the edges with adhesive
aths.—This practice has been successful in the hands of
e surgeons, who adopted it from the advice of its author—
the second stage, after the matter has formed on both
les of the parcels of the bone. a similar incision should
made the whole extent of the detached periosteum, and
eral perforations should also be made through the bone
evacuate the internal matter.—The wound is then to
treated as before.—This operation has often succeeded
preserving the bone, and preventing a protracted
ease &c.—
en in the third stage, when the matter is effused

o the soft parts, this operation may be performed, although
prospect of success is much less, than in the other stages
the bone may be dead and partially seperated from the
lthy parts. — The incision should always be freely made
thereby, if necessary, the dead portion of bone, will be
re easily detached than if the incision had been
n all in the first instance. —
f the discharge should become too copious, it is re-
ommended to use a solution of corrosive sublimate
rs to a pint of water — once every four or five days. —
nd to correct the foetor a solution of carbonas potassæ
own in with a syringe will generally succeed — We
ould presume that the Pyro ligneous acid would ful-
l this indication very well. —
hen from neglect or from the operation being delayed
long, a sequestrum may be formed, the propriety of
operation for the removal of which, must be determined
the contingent circumstances of the case. —
hen the flat bones are the seat of this disease, or when it is
lied superficially, Surgery can do but little to hasten its
ceration — It will generally be accomplished in time
the natural process. — When the dead bone, consists of
ortion of the body of the bone, when it is surrounded by
involucrum, and when it is seperated from the healthy
, which is ascertained by its giving pain on pressure — The
ration for its removal, should be performed without
ay —

his operation varies so much in different cases, that we
ly are enabled to give general precepts regarding it –
dentgent circumstances will always suggest themselves to
e judicious Surgeon. –
e French Surgeons rejected this operation <u>in toto</u> – It
been, however, often performed by the English Surgeons
d also by Surgeons of our own country –
e instruments necessary for performing this operation are a probe
ife – round saw – Keys saw – dressing and bone forceps – and an
vator. — When the portion of bone is small, it may were –
ved by a pair of dressing forceps. – But when large it may
necessary to make an incision, in extent according to the
gth of the sequestrum. — The following is the manner
oing the operation, as practised by Dr Smith. —
ert a probe into one of the sinuses, upon this introduce
e knife and cut upwards and downwards if one ex –
g according to the extent of the disease. – The incision
uld be carried down to the new bone or sequestrum
rding to circumstances. – It will often be necessary
break the sequestrum before we can seperate it, and
times to apply the trephine to the sound bone and by that
ans to remove to remove the dead portion of bone. –
e wound is then to be dressed and treated as we would
t other simple incised wounds. –
e state of the general system should always be attend
to in this disease. – The prevailing diathesis should if
ible be corrected – The system should be supported

e state, which will come as near to perfect health as
ible. — Gentle cathartics, as calomel and Rhubarb may be
en when indicated — Mild tonics as Carbonas Ferri — Lub
s Gnei — Infusion of Quassia — Bark alone — or what is
ghly recommended combined with corrosive sublimate. —
e using mercury one should always avoid a salivation
ich would tend to debilitate the system. —
e diet should also be attended to. — Jellys — Beef steak
utton & fowl, and any mild nourishing article. — Moderate
ercise may also be taken if convenient. — The patient
uld most religiously avoid, all exciting causes, and
ry circumstance which would have a tendency
debilitate the system and affect the general health

JJNJS.

Dissertatio Inauguralis
de
Hæmorrhagia.

Hæmorrhagiam, seu vulnerata arteria extrinsecus sanguinis effusione, aut effectum exitii arteria, a morbida actione contemplemur; tamen rei magnitudo, ab nulla in Medicina vel Chirurgia arcanis non aquiparatur. — Inde fit, ut investigatio quæ ad occuratam tractationem talis rei, nos perducit, non tantum postulat contemplationem justam, Scientia Anatomica fundatam. Sed etiam postulat, sæpe ut tales casus, investigator ipse inspexerit. Utcunque enim Anatomia, Œconomia vitalis, muneribus salutiferis, vel doctrina morborum plerumque accepta, consentiamus, tamen tali eventu non viso, ducere nequimus vel minimam estimationem, omnium quæ inde sequentur. Ac si tyro medicus, scientiam suam ægroto probare acceptus foret,

accepto ortas esse, ex administrandis muneribus Academiæ.

Hæmorrhagiam ex laceratis aut vulneratis arteriis, non fert animus precipue observare, sed plerumque observarem, doctrinam qua Hæmorrhagiam concretionis formatione impedit; attentis officis coaguli vel benignione contractionis interpositione, in ejus consequentiis adeo terribilem factam esse, cum praxi appositam; ut tam facile crederemus, Doctorum Jones ex manibus surrexisse ad coaguli amplificandam doctrinam quam eundem morbum subegis, coaguli interpositione, vel mortem a suo proposito detereri posse ab contractione arteria optimata musculosa tunica

Nulla demonstratio certius aparebet quam coagulum formari non posset sanguine semper se movente per partes illasas Ejus motens impellitur impetu qui sufficit magnis

propositas vita, ab extremas partes. Sed potest perenontari anne eruditissimi scientia Medicina insumserunt magnam operam, & post deliberationem cautam et investigationem exactam, suas sententias de ea re hoc modo dederunt, ut ii sint modi quibus natura utitur ut se conservaret, cum a cruenta morte minetur. Non tantum eam eruditione defenderunt, sed ipso facto, casus producebant qui certissime veritatem eorum positionis gratiosa pronunciaverunt. His justissimus Quastionibus, Respondeo.
Prajudicium esse tam nocium, quam ejus tractationem fortissimo animo, pestiferam.
Hac positio est tam manifesta ut non argumento opus sit. Tunc observo eos homines qui occupati erant in hujus rei veritate, persuasos esse suam doctrinam non posse refutari; & suos labores tantum ad confirmandas (suas

suas sententias perductos fuisse. Comprobatur hac affirmatio periculo casuum qui dantur veritatis hujus doctrina sempiterna monumenta inquiramus exempli gratia casum Hemorrhagia quam coagulum impedivit. Prima quaestio est quomodo inveniebatur effusionem sanguinis ab hac causa cessavisse? Num pars examinata post vel ante mortem? Non credandum est Aegrotum se passurum scrutari, cultro cum morbus ejus relevatur! Igitur suspicandum est, scrutationem factam esse post mortem! Et inde, quaestio oriretur, quo morbo aegrotus obiit? Quoniam nobis non nunciatum est eum laboravisse alio morbo. Sed hac deliberatione omissa. Percunctor, aquum esse eventum a causa data perducere; quoniam causa gignes hos eventus amovenda est antequam sequetur eventus? Nam nemo dicet leges esse

easdem quæ mortuos & vivos gubernant neque negabo fieri posse coagulum formari, cum causa ejus formationi adversans submoveatur, id est motio sanguinis & etiam vita. Status verus simpliciter hoc appareret coagulum neque formari sanguine movente, sed esse coagulum effectum sanguinis qui remanebat in parte post mortem. Si hæc demonstratio non est vera intelligentia mea de hac re sensu impar est. Bonalli opponentur me conantem doctrina tam accepta adversari non oportere eam tam leviter tractare expectandum esset ut exponere conarer quo modo Hæmorrhagiam subducitur naturæ processu nam certum est ut obvenirent casus quibus sanguinis effusio ex vulnerata arteria impeditur ante non interponente & casus terminabatur tam felicter ac si ligatura adhibita esset. Ad hanc

partem rei me applicabo cum alios modos consideremus quos doctissimus credere valuisse ad hanc rem; Id est ad coagulum & contractionem, Illud satis manifeste apparebit minima vestigatione ut eadem quæ adversus concretionem objiciuntur valent adversus coagulum. Nam certissime esset in captum difficillimum inter illa discriminari, & postquam discrimen factum esset, constituere ei rei pretium, intelligentiam omni processu sagaciorem postularet.

Ingenue confitendum est mihi non prædatum me nella naturali vel comparata intelligentia, qua tali rei par est, verba a me ejusdem significationis accipiuntur, id est, Coagulum.

Sed alia est ratio qua arte fidem meretur quam adhibet natura ad Hæmorrhagiam subigendam; id est, cum invenit arteriam non accepisse coagulii & concretionis consilium,

Sed audactor declarabat eam non submissurum utique; suam authoritatem tunc interponit tunicas arteria invicem proximare jubet tali modo ut magnam vim Attergo resellere possit. Quoniam occuerunt casus inquibus vis Medicatrix neglecta fuit, putebatur necesse esse aliquam rem adhibere qua simul cum ejus practitis agiret in spe ut conjuncti conatus naturæ & artis sanitatem reducerent & discordiam ita subjerent vi. Talis apparebat summa doctrinæ quam permulti tam servilitar & libenter venerabantur quam Orientes simulacrorum cultor herbas horti sui: Quibus modis multos ad mortuos missos esse ~~[illegible]~~ timemus antequam necessaria mors advenit. Utcunque misericordi animo talis cogitatio set tamen ea de causa non minus veritatis habet: & dum expensis a sentiamus ut auxerii defectu multi vulneribus qua possent.

sanari mortui sint, etiam sincere credimus desiderium constituendi artis contemplationem sine fundamento sanguineum optimum gentium bibisse copiosissime & secutali scientia & mundo optimas spes & pulcerrima ornamenta rapuisse.

Sed ut redeam ad considerandam contractionem sepe audimus ut Natura fiere posset adversari & cum ita sint res, nobis scio nunciatum est, ut certa res quæ astringentes appellantur tantam vim habent servandi quorum interest. Magnis animis generata hæ cogitationes experiebantur; & Esculapii studiosi discipuli varia certiores facti sunt de indicio aliquorum medicamentorum quæ ab constringente vi possent cito impedire arteria ruptionem effundintis ejus sanguinis. Ideo nulla sunt remedia, quæ tanti momenti, rei paria, ut honerata essent quasi sejuncta, & descreta series medicaminis imo numerus est

tam formidolosus, ut terrorem ac metum tyronis medici excitaret, ne sua omnis industria ad comparandam scientiam nunc cujusque sit par. Ex his cogitationibus nos animus fert modum operandi perquirere medicina qua a vitam periculosam & tam horidum morbum impediendi justissime considerunda est a cælo dimissum donum optissimum hominibus & dignum prophetæ virga comparari.

Cullen astringentes esse talia medicamina explicat qualia humano corpori adhibita contractionem & densitatem creant in musculosis fibris, & itaque densitatem & solestatem coherendi augent, et hoc significatur illa designari uti in morbus quibus suspicemur debilitatem esse musculosis fibris. Et secundum Chapmans & Murray corrugandi vi vel directe aut indirecte partibus adhibita aut actione

mutuo affectu orta producta morbidi affectus a conditione Relaxationis orientes removeri intan=
=tur. Auctor proxime memoratus in capitis contorsiatione observaret: Vulneribus sanguine fundentibus adhibebat restriationem Hæmor=
=hagiam eviderentur eadem vi. Id est, potestate corrugandi. Breviter ad voluntaria Hæmorrhagia, causas redeamus. Et prima consideratio est ut omnibus latibus morbis referenda est causa auctam excitationem; cujus diuturna sedulitate, vim adversandi cordi amisit; hoc modo constituens id quod posset appellari Hæmorrhagiam indirecta Debilitatis. Non ut literatorum non=
nulli de Hæmorrhagia Passiva loquuntur; nam cum verbum passivum animantium actione adhibeatur, vel sana aut morbo affectæ, ver=
=borum interpretationem non intelligimus aut

sententias qua per ea verba desiderantur intelligi. Si causa Haemorrhagiam explicandi positionem fundatam accurata speculatione assumsimus, vim astringentium apparet (secundum explicationem ante datam) esse contrariam potestati sanitatem reducendi. Nam sequidem nostra explicationis omne phenomenon vel directe aut indirecte ~~[illegible]~~ in incremento vita in universo corpore requiescit; manifestum fit ut quivis modus qui hanc conditionem augeret, incrementum necessario omnium producet qua ex morbo sequentur. Sed ulteriores interrogationis causa putabimus ut neque ante disposita aut concita causa est argumentum universa aut aucta irritationis vel incitationis ad locum pertinentis; aut aliter, jacutra saburra non requiescit, inter

partem praecipuam, & corporis habitum mirevsum; Sed ut effectus omnes demonstrentur putando esse nihil amplius quam vasis relaxationem; qua diuceps pro effusione sanguinis accipitur, omnia qua Hemorrhagiam probantur da, ut hoc opinio fidosa perquisitione renovaretur. Rogo, num potest fieri ut astringentium corrugans potestas conditionem vasis ita mutaret, ut sanguinis effusio cessaret? Si detur huic ~~[illegible]~~ interrogationi affirmatio, aliam propono. Quisnam Homo sensu praditus, si ad casum accitus foret in quo femoris arteria aut alia magna arteria vulnerata, erat Homacho astringentes apponeret aut eos localiter adhiberet sub fiducia cessaret inde Hemorrhagia?

Possimus credere hominem, aliquam

Tamen videatur simulantem habere cum legibus vita animantium ita se gerere! ~~[illegible]~~ Quamvis videatur mirandum tamen aliqui sunt qui indirecte ita loquentur et agunt.

Dico indirecte; siquidem non significarent tales praecios prosrutatem, in casu quem elegimus: Sed nobis nunciant ut in casibus quibus sanguinis effusio ex Utero; Stomacho, aut Pulmoni, oritur non tuta solum praecis sed etiam efficax. Hic rogandum est mihi veniam, veracissimam thesin assumendi; omnes res similes natura & actione; & sub eodem imperio certissime iisdem modis efficundas esse: Atque plus quam unum Cor in eodem corpore nunquam audivi; aut fundamentales leges, qua vitam venius partis corporis gubernant tote dissimiles

esse his alterius. Affirmationem non possim estimare qua asseverat quamvis Hæmorrhagiam orientem a Femoralis arteria injuria ab astringentibus non posse subegi; tamen si morbus in alia parte locata sit, prabet remidium, salutem!

Sed sine ejusmodi consequentiis illud; Credo esse tam verum quam ullam axioma in Euclido, nullam medicinam tale effectum posse redere in fibris vasis ut vires compremendi fluorem conjectum tanta vi superaret quoniam ex Cordi sanguis fluit; hanc sententiam pluris estimamus quoniam amplitudinem cujusque Arteria currente sanguine occupatam esse ita pretera argumentum subjiciens impossibilitate contractionis vasis sibi; causa peragendi quod necessarium esset ut impediretur sanguis

Arteriam Lasam intrare, manifestum est ut nulla medicina quæ non mortem acceleraret perrigere posset. Cum his cogitationibus conficemur ut nunquoque morbo Hæmorrhagia ad arterias pertinentis cujuscunque generis aut ordinis; Si Ægrotorum salutem corrugantibus astringentium commitet; illi erit nihil aliud operis quam subjungere cum Historia morbi finem narationis. Hernez Le Fevre Pulsus fluctuat ..... Cessabat ..... — Pergebat ..... Palpitat ..... Cessabat iterum ..... Movebat ..... Cessabat Pergam? Minime. ..... —

Nunc ad promissum explicandi modos quos subigere natura effusionem sanguinis adhibet redimus. Penitus secari potest arteria: Ipsa ars alterutera potest

Retrahere ita ut alte circumsistentibus partibus partibus separari & ita effusum sanguinis impedire: Vel postquam arteria vulneratur in circumsestem membranam potest injici qua formans saccum secundum ejus volumen necesse est quondam sonderis conditionem exercere, ut tunicas arteria agitans ejus lumen sensim deminuet inflamatione excita ab irritatione perfectam conjunctionem efficet intima tunica arteria. Utroque casu peditur vas & nunquam iterum erit medium sanguinis se moventis; Experimentum accuratam quoniam vicerat vulneratam arteriam non convalescere & redigi ad prostinum statum.

Tractatio

Tractatio

Si vulnerata arteria, sic posita est intra manus potestatem filum ceratum per foramen insere aut alio ideneo utere, & mittens ad cante sub arteria ligaturam circumliga, & eam cum bene vincto nodo constringe. Hac praxis non est objicunda; nisi in casibus quibus ita parva arteria est & ita posita ut posset facile contra os comprimi; Et vel tali statu inguo compressio omnino Hamorrhagiam subigeret; tantum antiferetur ad irritationem effugiendam partium dissectione factam quam esse est facere, ita ut exponeretur vas ad ligaturam applicandum

Sed cum ex ~~[illegible]~~ intima causa sanguis provenit & indirco extra chirurgicum auxilium, potestatem vita aggredimur & subigimus, sanguinem ex brachio aut

alibi emittento; non mensura, sed secundum indiciorum necessitatem.— Geledi solus.— maxime tranquilis & idcirco recumbens status accommodationes frigores, cum calorem abstrahendi & ita diminuendi irritationem — & effugiendi omnes causas quæ afficerent ægroti animum.

Sta praxis in habemus sub speciosis argumentis non fundatam; sed sedula investigatione Etiam & experientia. Praxis quæ medico Jamam invulneratam calumnia malevolorum præbet aut opprobio animorum obstructorum: Quoniam coaguli fiducia vel ~~[illegible]~~ aliorum talium fanniculorum impurorum; non tantum ægrotum præmaturum incolam tumuli præmittet; Sed in Jamiam medico

An

Inaugural Dissertation

On The Effects of Disappointed Love

Submitted

to the Examination of the Honble the Provost
the Trustees and Professors of

The University of Maryland

By

Joseph McCoy Sitler

Candidate for the Degree of
Doctor Medicina
in said Institution

1828

To John B Davidge M.D.
Professor of Anatomy in the
University of Maryland

Dear Sir

To you under whose fostering care I have laid the substructure of my Medical Education, permit me to dedicate this essay, as a small tribute of that respect, which I in conjunction with a numerous Public have for your virtues as a man and acquirements as a Scholar

I have the honour Dear Sir to remain with much respect
Your Sincere and Obliged Friend

Joseph McCoy Sellers

Improbe Amor! quid non mortalia pectora cogis?

The subject, I have chosen as an Inaugural Dissertation, is one which from its novelty, may be deemed trifling, and uninteresting, but as it so materially concerns the health, happiness, and welfare, of that portion of the human family, whose lot it is to alleviate the misfortunes, and avert the miseries, of man, imperiously demands our serious and considerate attention.

Those persons who mostly become the victims, of affections of this kind, are generally of a melancholy temperament, and delicate constitution; They are such as are possessed of a vivid imagination, and accompanied with that sprightliness of intellect, which has been termed wit; Whenever we behold persons of this cast, who appear to possess a feeling heart, and readily sympathise with the afflictions of others, we may immediately conclude, that they are those whose minds are most susceptible of impressions of this kind.

Notwithstanding persons of this class, are most generally affected, yet those whose dispositions, and appearances are diametrically opposite are also liable to these diseases. We have a striking illustration of this in queen, Elizabeth, who in the language of a celebrated historian, swayed the sceptre of the British Empire, with more potency than any monarch, or by whom she was preceded, being

and who was unquestionably possessed of an intellect of the most vigorous kind an inflexible and implacable disposition bordering upon cruelty falling a prey at last to a passion of the most tender kind. Numerous other instances might be adduced if it were necessary to prove the reality of the assertion I have made that persons of all classes but more especially those I have mentioned in the first place may become victims of the most appalling diseases occasioned by the effects of disappointed love.

Disappointed ambition is in some respects analagous to disappointed affection but it generally occurs to persons of a robust constitutions and sanguine temperaments who are more capable of destroying such vicissitudes than those who are ones the subjects of the more feeling passions. Thus Milton in his Paradise Lost beautifully alludes to the capability of man to undergo more hardship than his mate in the following lines

For solour he and contemplation formed
For softness she and sweet attractive grace

This may be accounted as the explanation of the great disparity of effect produced by this or other causes upon the sexes: yet instances have been known of persons belonging to the other who have been endowed by nature with every faculty of superior intellect and feelings of the most obdurate description becoming slaves as it were to this irresistible passion and acknowledging its power with

with the most abject devotion.

Various diseases by which a portion of the human family is afflicted might be traced to such an origin and much more successfully treated if their true cause were known than by attributing them to mere local disorder and applying our healing powers upon such predications. How often do we see persons labouring under the weight of accumulated disease pining in misery and sinking quietly and apparently without a cause into the grave without our being able to assist them in the least when if the true origin of their affections were known they could be easily understood and perhaps by the assistance of art aided by cheerful company and consolatory converse be entirely eradicated.

Numerous is the train of diseases which follow such impression and to enumerate them as in the limited scope of this essay would be termed the work of supererogation. I shall therefore only take notice of a few of the most prominent and those which have more especially required the assistance of the physician. One which is most often the consequence of this species of affection and which of all generally assumed the most alarming appearance has been termed by nosologists chlorosis from the green pallid

and cadaverous appearance of the countenance It is derived from the Greek word χλωρος importing green, and has been defined by Dr Cullen in the following manner Dyspepsia vel ei non resolentes; cutis pallor vel decoloratio; menses plena, corporis tumor mollis asthenia; pulsatio menstruorum retentis

Two species of this disease have been instituted by Dr Good with a great degree of correctness. One which he terms chlorosis Entonica in contradistinction to chlorosis atonica of which I intend treating depends according to him upon an entonic and plethoric condition of the system whilst the other is always accompanied with more or less atony and debility. The first of these species generally occurs in girls of a blooming vigorous and healthful habit whilst the other is incidental to those of a sad and melancholy dispositions or such as have had their constitutions shattered by disease dissipation or mental affection. As the first cannot properly be considered as one of the sequela of the affections I am treating it is not my province to recognise it in this essay but as it has been so intimately blended with the other by an author of high and deserved reputation I have deemed it necessary to glance at it superficially lest by destroying the connexion I should also fail to display in its true light the marked disparity

which exists between them and which gives to the latter a degree of so far greater importance

There always exist in conjunction with the symptoms above enumerated a great fickleness of temper and corporeal debility

This disease generally attacks in a slow and insidious manner entirely prostrating the unhappy patient ere she or her friends are aware of the dangerous situation in which she is placed. Indeed when it is the effect of the cause I have attributed ~~it to~~ it the patient herself scarcely bestows upon it or any thing else the least show of her attention and regardless of the manner of preserving ~~is~~ its tedious lingers out a miserable and wretched life until Death at last with a friendly hand puts a period to her sufferings

Shakespeare the great poet of Nature and to whose plastic hand we are so much indebted for our amusement has not failed to describe with scientific accuracy the symptoms of various diseases. In this case he appears to have understood its cause the pernicious and baleful effects resulting from it even with more accuracy than the cultivators of science themselves. In the following passage he has beautifully and with much pathos ~~des~~ portrayed its direful effects upon the system resulting

from the cause to which I have attributed it

She never told her love, but let concealment
Like a worm i the bud feed on her
damask cheek; she pined in thought
And with a green and yellow melancholy
Sat like Patience on a monument
Smiling at grief.

In the treatment of this species we should not as in the first plan which solely depends upon too much tone use the incrassative plan but rather endeavour to invigorate and strengthen the system with mild but effective tonics. The best of these is cheerful conversation and agreeable company. Very often when medicine in all its forms entirely fails to accomplish any desirable purpose towards the restoration of health a tour through some agreeable part of the country remote from the noise disturbance and inquinated atmosphere of populous cities where the patient can enjoy the advantages of salubrious breezes accompanied by some intimate friend to whom she can communicate her sorrows and receive condolence will almost effect a total and radical cure

Various have been the medicinal applications for the palliation and cure of this disease as with almost every hypo

-theses which has received currency enough to sway the opinions of any part of the medical world new applications supposed to be best adapted to it have been recommen-ded. I shall therefore only take notice of those which have stood the test of ~~the~~ such conflicting opinions and which are sanction-ed by the practice of the present day

Astringent tonics have been warmly recom-mended but they do not appear to possess a very salutary influence. Myrh has been long administered as a standard medicine but without exerting any beneficial tendency The only tonics upon which we can depend and by the use of which we can at all curb the progress of the disease are the metalic. Of these those of the chalybeate and cupreous class have been found to be by far the most ~~important~~ effective Iron administered in the form of the sulph-hate or green vitriol is a very efficient remedy. In cases of acidity of the stomach combined with myrh and fixed alkali it is a safe and powerful medicament. Copper in the form of the cupreum Amoniacum has been and still continues to be a favour-ite remedy. Whether or not it exerts much influence over the disease is a question which has not yet been satisfactorily de

-termined —

Mineral waters of the chaly-beate kind are very useful in the dis-ease. Sea bathing has been practised and its effects found to be very bene-ficial. Perhaps a great many of the advantages supposed to be derived from the use of the sea bath ought to be attributed to the change of scenery and company which the patient experiences rather than the tonic influence it exerts over the human constitution Yet no doubt this is a powerful adjuvant to other measures. It is particularly useful when the patient can at the same time enjoy the advantages of a sequestered retreat in some small hamlet situated ~~near the sea shore~~ contiguously to the sea shore where it can be resorted to at all times and the patient can breathe the healthy atmosphere of such a place and the conversation and other enjoyments to be derived from the simple and un-affected manners of a country life

There are numerous other diseases which it is useless for me to mention but which can be best understood by adverting to treatises already published upon them

An Inaugural dissertation
On Anthrax

Submitted to the consideration
Of

The Rt. Revd. James Kemp D.D. Provost

And of the Regents
of

The University of Maryland.

For the Degree of Doctor
of Medicine
By
Francis McCoy
of
Maryland

1825

To

Dr Colin Mackenzie

Dear Sir

Brief & imperfect as the present essay must necessarily be, I am nevertheless persuaded to believe, that with the usual urbanity of your disposition, you will excuse the liberty I have taken of inscribing it to you. I was desirous of prefixing your name to it, because in the circle of my medical friends, there is no one to whom I feel so much indebted for my advancement in the science of medicine as yourself; nor was I less anxious of tendering a small tribute of respect to you, on account of the kind & polite attention, I received from you since I have had the pleasure to reside under your kind protection: for which I shall ever hold you in my remembrance, as one of the first of your profession, and that you may be rewarded according to your merits, is the unfeigned wish & ardent desire of your sincere friend

Francis M'Coy

An
Inaugural dissertation &c

Anthrax is an inflammatory, indurated, distinctly circumscribed, very painful swelling, of a dark red or dull brown colour, somewhat resembling a boil, but larger, and like it containing a portion of gangrenous cellular membrane. It is more like an aggravated description of boil, than any other tumour with which it can be compared, though it differs not only in being larger, but also in not presenting so conical a protuberance; the chief part of the swelling lying deep, and none of it being much elevated above the level of the skin. While boils seldom exceed a pigeon's egg in size, an Anthrax is sometimes as broad as a common plate.

This size is however only to be met with in severe cases. Sometimes the super incumbent skin, besides being discoloured in the manner above described, becomes so remarkably hardened & thickened, that it feels like brawn. The disease in fact is always attended with extraordinary pain and induration, and the patient is generally much afflicted with a sensation of burning & stiffness in the part.

The dark red or dull brown colour of the skin is for the most part chiefly seen upon the centre of the swelling, though in some instances, the pain and discoloration extend far around. As the disease advances, one or more livid or darkish vesicles, filled with an irritating sanies, formed upon its surface, which is a certain mark of the subjacent gangrenous mischief. On the apex of the swelling,

dark, livid spot, bounded by an inflammatory circle, next makes its appearance, followed by the formation of one or several small inadequate apertures, through which a yellow, greenish, bloody, highly fetid discharge flows out, while the great mass of matter, and sloughy cellular membrane still remains confined. As in the boil, the greatest degree of sloughing in all carbuncles is at their deepest part or base, which occupies a much wider space than the more superficial part of the tumour. In many cases indeed, the deeply seated gangrene, is extensive even when the unaltered state of the super-incumbent integuments, causes little suspicion of the mischief By slow degrees all the sloughs, composing as it were the nucleus of Anthrax, are discharged leaving a deep ulcer, at the bottom of which one may sometimes see the exposed muscles and tendons.

Anthrax seems mostly to arise from internal causes, being generally preceded & accompanied with serious constitutional indisposition It generally follows Yellow & Bilious fevers and also Typhus fever in this country. It sometimes happens during the patients labouring under some of the above fevers, and when this is the case, the fever must be attended to and cured, before the Anthrax can be cured.

Sometimes the concomitant fever is, at first, of the sympathetic inflammatory kind; but it generally soon changes into a febrile disorder, the leading feature of which is extreme debility. Great prostration of strength, violent headachs, sickness loathing of food, and a variety of low febrile symtoms, are the common forerunners and companions of the local disorder, and in bad cases, syncope, extreme anxiety & restlessness.

The Anthrax is well known to be among the symptoms of the plague, and in Great Britain, it is often attended with severe illness, not unlike the worst sort of Typhus fever. The milder forms of Anthrax, where the swelling is not very large, nor the general indisposition at all dangerous, sometimes receive the appellation of simple or benign.

When the case is the reverse of this state, and more especially, when the fever is of a bad type, the Anthrax is termed malignant to which the epithet idiopathic is sometimes annexed. In this case the swelling exhibits a darker colour than in the less severe instances, and the surrounding edema of the skin is more considerable.

The carbuncle of the plague is called pestilential or symptomatic There is another variety, which is known in the south of France by the name of the malignant pustule. While the other kinds of carbuncle may present themselves to the number of two, three, or more in the same patient, the malignant pustule is said to be almost invariably single. It is said by some authors, that, in all cases of Anthrax (except the malignant pustule) some fever or indisposition always precedes the tumours, but this is not always the case. In the case of Mr Wharton, Dr Physick's patient, nor in the case of a yellow woman Dr Jameson's patient, there were no symptoms of fever, indisposition, nor disease preceding the appearance of the tumour. On its first appearance, it resembles the bite of a flea, causing a painful itching or burning and quickly turns livid or brownish. In the substance of the integument, a circumscribed flat tubercle is next perceived, this becomes gangrenous, and is converted into a hard, black slough,

which is bounded by a reddish, shining, violet, vesicular areola.

The progress is sometimes very rapid; it will spread in a few days from the size of a bite of a flea, to the size of a plate; sometimes the greatest prostration of strength comes on very suddenly, the pulse gets weak. The malignant Anthrax is said to attack all parts of the surface of the body with nearly equal frequency, except the palms of the hands, the scalp and the soles of the feet. On the contrary, the benign Anthrax is most commonly seen on the nape of the neck, the back, the nates, or the extremities. The malignant pustule is alledged to attack such parts of the body as are habitually naked, like the face, neck breast, shoulders, hands, arms &c. The pestilential carbuncle is most prone to occur on very fleshy parts, and is said never to happen in the arm pits, groins or other situations, which are naturally covered with hair. The benign Anthrax may afflict subjects, who are apparently of healthy constitutions, as well as the infirm. It seems, in general, to arise spontaneously from internal, unknown causes; but, sometimes as the sequela of some other disorder of the system. It generally happens in Yellow or in Bilious fever and sometimes in Typhus fever.

The causes of the malignant Anthrax are also of an internal unknown nature. The disease, however, is said to be restricted to certain parts and seasons, and sometimes to be epidemic. It happens most in old persons, and especially in those, who indulge in the excesses of the table. The pestilential carbuncle has for its cause, the plague. In all cases of carbuncles, the prognosis depends very much on the size and situation of the swelling; on the number of such tumours;

and above all, on the state of the constitution. If, together with a carbuncle of considerable magnitude, we remark great prostration of strength syncope, frequent vomiting, delirium &c the danger is urgent.

Treatment of Anthrax or Carbuncle

The carbuncles differ from each other chiefly in degree, and in being attended either with inflammatory fever, disorder of the stomach & other digestive organs; or with extreme debility and typhoid symptoms. When, as sometimes happens, in the beginning of the disease, a good deal of inflammatory fever prevails, moderate venesection, mild saline purgatives and the antiphlogistic regimen are indicated. But, as the change from strength to weakness is often extremely sudden, the lancet should be employed with caution, and few patients will bear the loss of much blood with advantage. Indeed, the antiphlogistic plan can seldom be continued beyond the first few days, after which tonics generally become necessary. Where there is reason to suppose the origin of Anthrax to be connected with disorder of the chylopoietic organs (and it is generally believed, that, the chylopoietic organs are almost always disordered in cases of Anthrax) if the patient is able to bear it, nothing is better than to purge well with Submurias Hydrargyri, and assisted by other cooling cathartics, and some cooling febrifuge drink. If carbuncles occur, while the patient is labouring under Yellow fever, Bilious fever, or Typhus, the first disease must be attended to, and cured, before the carbuncle can be cured. In this case, however, as in all other examples of Anthrax, so great is the tendency

to sudden prostration of strength, and Typhoid symptoms, that a tonic plan must immediately follow the means, which have been adopted in the early stage, with a view of improving the state of the thyloporetic viscera. Here bark, camphor and wine are medicines of the greatest value. As the pain of carbuncles is generally very severe, Opium is another remedy, which can seldom be dispensed with; and it is frequently a good plan to prescribe it in repeated doses, so as to keep the patient under its influence. In very bad cases, attended with delirium blisters should be used, and with other medicines camphor should be combined. The patient should enjoy fresh air. The local treatment of carbuncles is more simple than the constitutional, because in every case there are a few leading indications, which ought to be observed. Cold astringent applications are of no use, they are injurious

The openings, which form in the tumour, are sometimes numerous, but so small that the matter and sloughs cannot readily escape As they are likewise slow in forming, as well as inadequate to give a free outlet to the contents of the tumour; some surgeons recommend to make an early and free incision; and then to press out as much of the matter and sanguinous cellular membrane as possible, without causing too much pain, and then to apply an emollient poultice; the rest of the sloughs gradually lessen; the discharge improves in quality; the surrounding induration diminishes; the ulcer becomes cleaner and granulates, and the cavity is at length filled up and healed. But, making a free and early incision into the tumour and pressing out as much of the matter and cellular membrane as

as possible, are unnecessary and painful operations to the patient.

All that is necessary to be done in this case, is to take the common epispastic plaster, and spread it on small dossils of lint, and carefully introduce the dossils into the openings in the tumour, over this a plaster of the same ointment spread on old linen is to be laid, covering the skin somewhat beyond the swelling. This will have a very salutary effect; it improves the colour of the tumour and the discharges also. A blister is not more painful to the patient, when applied to an Anthrax, than when it is applied to the sound & healthy parts. It causes the tumour to slough sooner, and healthy granulation to shoot up sooner; it can be applied over all the tumour, and into all the small ulcers in it. Some surgeons recommend to burn a hole in the centre of the tumour, the size of a dollar and then to apply large warm poultices to it, to bring about suppuration.

Some of the French surgeons recommend the use of the actual cautery. Some of the modern French surgeons also occasionally employ the strongest caustics, such as the Muriate of Antimony; Sulphuric acid; Muriatic acid &c. Some surgeons recommend stimulating, antiseptic poultices. We are of opinion, that the epispastic ointment is a better external application to carbuncles, than any of the other applications, which have been recommended. The application of the epispastic ointment is not attended with more pain than when it is applied to sound and healthy parts. There is another great advantage in the epispastic ointment, that it may be applied with great advantage to the carbuncle until all the

sloughing is removed, then it should be treated by mild applications.

The better to illustrate the utility of epispastic ointment to Anthrax, I will give the detail of three cases of Anthrax, which happened in Dr. Cameron's practice, which were successfully treated by the epispastic ointment. The cases are given in his own words

Case 1st

"During the summer of 1824, a case of simple carbuncle occurred on the thigh of a muscular yellow woman. Its cause unknown.

There was a tumour nearly circular in its base, near eight inches diameter. The part exceedingly hard and painful, so much so as to prevent the patient from walking. There was some fever, and interruption to the healthy operation of the digestive organs. Seeing that there would necessarily be extreme suffering in the employment of caustic, incision &c usually employed, I was anxious to avoid the application of such harsh and painful means as these must necessarily be where the tumour is so extensive, and knowing from experience the delay attendant upon the employment of poultices &c as advised by some surgeons (and indeed there had been employed some days, without assuaging the pain or lessening the swelling.) I resolved upon trying the effect of an epispastic. This was applied so as to extend some distance, perhaps an inch beyond the circumference of the tumour. The favorable result far exceeded my expectation. In a few days the pain and swelling were dispersed by simply keeping the blister open and aiding this local remedy, by the use of two or three saline purges

Case 2d

In the same year and season, I was called to see a man, affected

with symptoms of a severe bilious fever, who was also suffering much with an ill-looking swelling on the occiput close upon the neck. It was nearly the size of an egg, very hard and exquisitely painful. It had been treated with emollient poultices and had, in some measure, suppurated; there was a very dark red or purplish colour of the skin over the tumour and several perforations from sloughing, through these there was a considerable discharge of ill-looking pus and ichor. The granulations were flaccid, the surface of the tumour irregular. The common emplastic plaster was spread on dossils of lint and carefully introduced into the openings, over this was laid a plaster of the same ointment spread on old linen and covering the skin somewhat beyond the swelling.

This dressing had a very salutary effect; the deep colour disappeared the discharge improved and the pain abated and with proper attention to the bilious symptoms the patient was relieved sooner than, under any ordinary treatment, could have been expected

Case 3d

A delicate young lady was overtaken with a very large boil, as was supposed, about the middle of the right sacra lumbalis muscle. It was attended with much pain and in addition to this, the patient and friends were much alarmed at the supervension of almost total inability to move the lower limb. The swelling presented precisely the same appearances as case second, the deep colour, severe pain, ill digested discharge, ill-looking openings with unhealthy flaccid granulations. The same remedy, as above, was applied. The ointment was carefully introduced into the openings and the whole covered with the

epispastic ointment spread on linen. This dressing was continued until the ulcers took on a healthy aspect. There were considerable fever headach &c upon these symptoms supervened a severe attack of Erysipelas A moderate bleeding and the usual antiphlogistic remedies were quickly instrumental in affording relief. As the pain abated and the ulcers began to heal, the nervous power in the lower limbs gradually returned. It may be proper to remark, that, although the palsy of the lower extremities was such as to disable her from standing still the sphincters were not affected." The symptoms in this case lead a person to believe, that the inflammation must be peculiarly intense The inflammation, attending common phlegmonoid swellings in this part, I believe, reach the nerves of the spine so as to interrupt them in their functions.

Riverius, I believe, was the first person, who recommended blisters in cases of carbuncle, but he does not appear to have applied them directly to the part, nor did he entertain very correct notions concerning how they operated. In a case which he details, in which the carbuncle was situated on the forehead, a blister was put on the neck, and to it the cure was mainly attributed. In this country, blisters were first suggested, not many years since, by, I believe, Dr. Physick, in consequence of the beneficial effects which had been found to result from their use in checking the progress of mortification. He lately has given the preference to the use of caustics. Dr. B. Beck also treated a case of Anthrax successfully, by the repeated use of blisters (page 37 N. York medical and physical journal for 1823)

The above cases supported by the astonishing effects, which we see resulting from the use of epispastics to gangrenous inflammations & other ill-conditioned inflammations are sufficient to shew the great value of the epispastic ointment in such diseases. And the cases of carbuncle afford the agreeable fact, that the remedy under notice is suited to every stage of carbuncular inflammation. In the first case, where the disease was of an alarming extent the remedy prevented the occurrence of suppuration. And every one knows the severe nature of this sort of suppuration. That this remedy is greatly superior to the use of caustic &c is evident, since a blister is not more painful to such a swelling, than on other healthy parts, and after the part has been blistered, the epispastic ointment affords an easy dressing. This fact is also found to prevail in the use of blisters, in cases of gangrene, so that the parts may always be dressed with the epispastic ointment for some days with safety and advantage without subjecting the patient to pain.

An Inaugural Dissertation

on

Diabetes Mellitus

Submitted to the examination of

the Provost

Trustees and Medical Faculty

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Washington Dorsey of Maryland

Dedication

Anxious to offer some testimonial of my high respect for my Preceptor, Dr. Samuel Baker Professor of Materia Medica, in the University of Maryland, I have used this medium to express my admiration for his many able qualifications, as Physician, and unsurpassed ability as a Preceptor — to his talent alone in that respect, I am indebted for all my Practical, Medical, knowledge, which is the most dear, and from his instructions I was enabled to compose this Inaugural Dissertation. 'Tis but a feeble mode, of returning thanks for the many favors received at your hands. It is therefore submitted to your indulgent scrutiny with very great respect, by your obliged pupil.

The author

Diabetes Mellitus

Many speculative views have been written on this disease heretofore. The ancient Physicians had it seems to me, quite as correct a view of the disease as the moderns. For we have from the pen of the celebrated Celsus. "The following definition of the disease" diabetes consists in a greater discharge of urine, than there is fluids taken in by the mouth" a less exceptionable definition of the disease, than has fallen from the pen of many of the more modern Physicians; for the illustrous Cullen, gives the following definition of the disease; "It consists" he says "in the voiding of a preternatural quantity of urine" thus losing sight apparently of the most characteristic feature of the Malady, namely the saccharine quality of the urine; many more, as late authors have fallen into the same error, in their definitions, leaving out of their descriptions, the saccharine quality of the urine discharged, the only symptom or, best symptom, to distinguish the disease now under consideration, from other preternatural flows of urine - for there are several such affections distinct from the one above - though they have all been confounded, with the one here mentioned - until Willis pointed the attention of the profession to the essential quality of the urine voided in this disease - the writers on this subject seemed to be

slumbering in error. Therefore by omitting to notice the peculiar feature of the malady, namely the saccharine quality of the urine. Physicians were constantly confounding other diseases with it; which ought to be kept separate, as all of them differ in some one particular of their cure; all being more curable than Diabetes Mellitus. The disease here will be defined by saying, that it is a form of urinary disease, in which the patient suffers great thirst, voracious appetite, and an obstinately dry and harsh skin. Urine being voided in an unusually large quantity, being, and sensibly impregnated with saccharine matter. Diabetes usually makes its appearance in a very gradual manner, although in some instances it comes on suddenly, with slight chills and febrile commotions. Where its invasion is gradual it is generally attended from the first with various indications of a disordered state of the digestive organs, such as variable appetite, acid eructations, occasional nausea, vomiting, and constipated bowels. The quantity of urine discharged in this affection is almost always extremely great, and in some instances truly enormous. The writer has seen one case, where the individual voided, in the course of twenty four hours, from ten to twelve pints of urine for several days. Dr. Cheek, now Professor

the Cincinnati Medical school says in his work on the Pratice of Medicine, he had seen two cases where the patients discharged, from twelve to fifteen pints of urine in twenty four hours, for several weeks. That such a drain from the system must cause great and rapid exhaustion and wasting of the body may be readily conceived; and indeed the utmost degree of prostration and emaciation never fail to ensue, as the disease advances in its course. The urine in this disease is generally of a pale straw color, approaching sometimes to a shade of green. Its smell is usually faint, resembling that of milk or according to some that of fresh animal broths; or perhaps more correctly its odour being that or nearly allied to the food taken in, - for we must consider all the juices of food taken, in this disease - pass off so rapidly that their properties are but little changed: The taste of the urine is more or less sweet, from the sugar which it contains. Diabetic urine always contains, very little or no urea, and in most instances, it is entirely destitute of lithic acid. It enters very slowly into the acetous or vinous fermentation, In these particulars it differs very essentially from the urine of other varieties of disease, resembling diabetes

in which latter it always putrefies with great rapidity and becomes exceedingly fetid —

— Symptoms — The constitutional symptoms which attend this disease, are very urgent thirst, craving appetite, dry skin, a distressing sense of weight, and uneasiness in the stomach, after taking food, dry and parched mouth, white, foul sometimes clean and red tongue; wasting of the flesh, a feeling of languor, and aversion to exercise, debility, pain, and weakness in the loins; irregular action of the bowels, being most commonly costive; some degree of inflammation, and pain about the prepuce, and glans penis, and especially about the external orifice of the urethra; loss of virility; cold feet, with a tendency to oedema, in the latter period of the disease; dull and aching eyes; indistinct vision with vertigo; headach and difficulty of breathing. As the disease gains violence and draws towards the fatal termination the gums become spongy and the breath fetid, or disagreeable, and the voice rough, or extremely weak and whispering. The emaciation and exhaustion proceed with great rapidity towards the conclusion, and the patient finally sinks into a state of somnolency or drowsiness, from which it is often extremely difficult to keep them rouse for

a moment. In general the pulse is but little or not at all accelerated; in the periods of the complaint, and in many instances it is less frequent than in health, but always having more tension about it. In the advanced stage of the disease it is not uncommon for the pulse to become frequent and quick. It is by no means unusual, for this disease to terminate in apoplexy. Professor Eberle on the disease remarks, "he saw a case where the patient became completely lethargic for 18 hours before death, during this period the urinary flow was almost entirely suspended." the stupor in such cases owing no doubt to effusion in the brain, from neglected inflammation, for it is certainly a highly inflammatory disease, which I shall endeavor to prove, It does seem in some families there is a predisposition to this disease; writers mention instances of two or more of the same family dying with this affection. I have known a father and son to suffer from this malady. of the exciting causes of Diabetes any thing that deranges the digestive organs, may produce the disease. The intemperate use of strong drinks excessive eating cold, long applied, protracted grief, all the depressing passions, &c —

Pathology

The opinions expressed by authors on the pathology of this disease are quite various - one seating it in the liver primarily; another finds it a place amongst the spasmodic diseases - a third giving it origin in the stomach alone - a fourth in the kidneys - the one in my view that is the most correct gives it a place in the digestive organs, with defective assimilation - bringing into concern the whole system secondarily; for to place it in the kidneys primarily we could not account for a single phenomenon in the disease - but in the Theory here advocated; we may account for some of its most prominent symptoms, first the saccharine quality of the urine may be looked for in the deficient assimilatory process; for any and every patient, takes in a sufficient quantity in their food of the component parts of sugar, to render the urine sweet. It is to be inferred from the symptoms in this disease, that the digestive organs are primarily concerned, every symptom showing distinctly the derangement of the alimentary canal, and it should be recollected that the immoderate flow of urine may be accounted for on the principal; that all of the particles of aliment taken, are presented to the assimilating apparatus in a rough, and uncongenial state, irritating them

+

and the mucus membrane of the intestinal canal; this irritation is imparted to the blood vessels and mucus membranes generally, showing itself more particularly; in the kidneys and bladder, from a predisposition in those organs to disease - expansion of the countenance, yellow tinge, and dryness of the skin, with yawning and stretching the limbs, points us to the seat of the malady in question, if we had no other marks to determine by, but we have other reasons for locating this disease in the digestive organs, which we now offer.

Post Mortem Marks - Teach us also that this malady is located in the Intestinal tube, first, from its Mucus membrane, and this, membrane, of all the mucus passages show the most extensive disease - the Mesenteric glands, and in lacteals present, traces of inflammation are seen, with the rest of system. It will be perceived that the writer, from remarks made above, conceives this disease may be produced in every instance, by an improper assimilatory process, for the very symptoms of this disease in its forming stage strengthens the opinions, about to be further advanced. First may be observed, its terminating so often in

Apoplexy, or with symptoms of congested Brain furnishes; we think strong argument in favor of its true location, and makes it always in the earlier stages an inflammatory disease,
It can be very readily conceived how this malady and all its train of symptoms, may be formed by first considering the food, being presented to an Alimentary Canal, whose functions are entirely altered by long continued stimulation from Alcohol or large meals of indigestable Aliment, the Atmospherical changes, or debauch long continued, any of the depressing passions renders, the morbid change in the Intestinal tube, throwing its component organs into disarray, consequent their secretions will be changed, which are furnished for this canal now we must consider all of the food taken, in this diseased state of the Alimentary Canal, as being subjected to a form of fermentative process, offering a half digested mass to the mouths of the ~~of the~~ ~~the~~ asimilating organs, they are made to act upon materials entirely uncongenial to them, or their nature being composed of a very delicate and irritable tissue, and are ~~ex~~ easily irritated, this irritation is propagated to the surrounding

nerves and blood vessels, giving rise to an inflammatory condition of the system generally. The saccharine quality of the urine in this disease may be accounted for, we think, on the principal, that all of the large Glands, and secretary vessels, in the system perform their separation, and adaptation of fluids, for the the purposes or health of the individual badly. and this opinion is strengthen, from the circumstance, that the saccharine quality of the urine is much diminished in proportion, that vegatable food is prohibited, and animal, is used in its place, which does not contain in so great a degree the constituents of sugar. The liver that great storehouse of diseases, is concerned in this malady, because of its importance in the animal economy, its office, (as we know) is to regulate secretions in the human system. The kidneys are involved in this disease, so far as their office authorises them to act upon fluids elaborated under diseased action, which proves highly offensive to them, from predisposition, because, of hereditary taint, or previous injury sustained by blows, falls or lifting heavy weights.

The difference between the disease here treated of, and Diabetes Insidus;

is that the latter consists in a slow action, and exists under an atonic condition of the system. And can only be cured by tonics - alone, such as the mineral acids, &c. Some benefit may also be obtained from local applications, of a stimulating character to the loins - such as plasters of Burgundy pitch, galbanum, turpentine, or stimulating embrocations. Active purgatives are injurious. The most serious consequences have been known to be produced from a small dose of an active purgative, therefore they must always be avoided. Rather should the bowels be suffered to remain constipated, as equal unpleasant symptoms have been known to arise from long continued constipated intestines. This state of things may be removed, by two or three Seidlitz powders, or small doses of Castor Oil, without risk of producing more debility.
The diet should be mild and nutritious.
In general, the lean parts of tender meats afford the best food for patients affected with this variety of urinary disease. In some instances, however, a diet of this kind, ~~under patients~~ very uncomfortable during the period of digestion.
In such cases, farinaceous, and particularly acescent vegetable articles of food, will usually answer very well. -

While the disease here treated of is brought on by high action only; and never exists with its characteristic symptoms, namely the saccharine quality of urine voided, the great abundance discharged, its straw color &c. unless under a tonic condition of the system, consequently, always in the first instances, it is an inflammatory disease.

I will here give the particulars of a case seen, and treated by the author successfully— A Gentlemen, aged about forty five Years, who had been a high feeder, and drank stimulating draughts every day, was seized August 13th 1835, with pain in the Epigastric region, vertigo, throbbing of the Carotids, and Arteries of the brain, red eyes, dimness of sight, a sense of weight in the lumber region, constipated bowels, obstinate dry and harsh skin, with an intense heat on the surface I was called to see the patient on the 16th inst. found the above symptoms present, with the addition of a tense and slow pulse, white tongue, great anxiety of countenance restlessness, with a well formed Diabetes Mellitus— he was cured by bloodletting

Calomel, and small doses of the Dovers powder. The father of this individual died from the same Malady. I mention this circumstance, to strengthen the opinion advanced, that in some instances it's a hereditary disease but always, I think in the beginning, an inflammatory Malady -

Prognosis.

This disease must be considered a highly dangerous one, resisting in the greater number of cases; the best directed treatment -
But we must treat this malady as an inflammatory disease, or we will be consantly unsuccessful in its cure. A favorable issue may be known by moisture of skin, by a gradual diminishing of the flow of urine, not a sudden stoppage of the quantity discharged, for that may be considered a fatal sign, a disappearance of the yellow tinge of the skin, also a return of the natural countenance. These may be regarded, as the most prominent signs of a favorable issue of the case -

"Treatment"

Diversified indeed has been the modes of treating this disease, and perhaps the reason it has been so, may be found in the Pathological errors that have been from time to time published:- For we must acknowledge that there has been taught many errors on this malady- a plan here will be adopted to treat it as a disease of irritation and inflammation; when we consider the symptoms presented in this disease; our minds are lead to the depleting measures of treatment. We are to take blood in the early part of this disease, until the force, and frequency of the pulse subsides:- when these symptoms exists- after this step 10 or 15 grains of Calomel should be given followed by a dose of Oleum Ricini, then small doses of Calomel in combination with Dovers powder, 1 grain of the former with 2 or 3 grains of the latter medicine every four or five hours, administering Castor Oil or other Aperients occasionly:- Proceeding with this treatment until the general system is affected by the calomel, then if their is any remedy required as a tonic, The Tinct: Muriat et Ferri-

With low diet or small portions of animal food, will be the mode to treat the patient. many more are mentioned by authors all having but little power in its cure.

We have observed after the loss of ten or fifteen ounces of blood, to change the condition of the patient much, first the pulse is reduced and softened this is remarked, the increased moisture of skin, the cephalic congestion to be diminished, the great anxiety of countenance is removed, the tongue more moist, the dimness of sight is lessened the redness of the eyes is noticed to subside, —

The calomel generally brings away several dark stools, the small dose of this medicine with Dovers powder, keeps the skin soft, and also is observed to diminish the inordinate flow of urine — with a change of the saccharine quality, straw color &c — local bleeding should be practiced over the lumber region, after the pulse has been made soft by bloodletting generally. —

Many more articles have been mentioned for the removal of this disease by authors but the principal part of them apply to the last stages of the disease, being more

of them stimulants, are counter indicated in the first stage of this malady, for reasons already stated - though we will pass some of them in review.

Magnesia has of late years been recommended in England as a remedy of considerable powers for the cure of Diabetes. Dr. Trotter has published an account of five cases which were effectually treated with this article. He directed his patients to take from one drachm and a half to two drachms of the pure magnesia in twenty four hours. this article is not adapted to the treatment of Diabetes Mellitus, if it has any virtue. tis for the cure of Diabetes Insipidus -

Emetics, are recommended by Richter, in the treatment of this disease. He has given an account of several cases in which cures were perfected by the use of Ipecacuanha in doses sufficient to produce active emesis. In one case, he asserts that the disease was removed completely in the course of twenty four hours, Emetics are better adapted to this disease, when it appears without congestion of the brain, or a tendency thereto.-

To the Provost,

Trustees, and Medical Faculty of

The University of Maryland

This

Inaugural Essay on the

Materia Alimentaria

is

Submitted

by

Richard C Ambler

of

Virginia

1831

If the number and complexity of organs, concerned in the performance of a function, afford any index to its importance, we must place the function of digestion in the first rank; the apparatus adapted to its purposes in different animals, is by no means similar, but on the contrary, it is found to vary with the nature of the food upon which it is designed to act, thus we find it more distinctly and elaborately developed in herbivorous, than in carnivorous animals, while in man, "who walks superior amid the glad creation", e whom bountiful God, has not confined either to vegetable or animal food, but who derives his supplies of nourishment from both of these kingdoms, it it possesses an intermediate organization.—

Such is the sympathy existing between this apparatus, and the rest of the animal economy, that the derangement of its organs gives origin to the greater number of maladies with which the ~~the~~ body is afflicted, and in its turn it suffers from the diseases of distant organs; it therefore becomes an object of importance to retain this apparatus

in a state of health and soundness, which can only be effected, by a just attention to the food we give it to operate upon. There are two sensations, which warn us of the demands for food made by this apparatus, viz: hunger, and thirst, the one calls for the introduction of solid aliment into the stomach, for the purpose of furnishing materials for the repair of the different textures of the body, and the other, for liquid matter to replace those various fluids, which are constantly ejected from the body, during the exercise of its various functions. We shall not stop to decide upon the merits of the various hypotheses, that have been devised to account for these sensations but will only mention, that physiologists of the present day, attribute the sensation of hunger to the stimulant action of the gastric juice upon the nerves of the stomach, and notice at the same time, what we shall hereafter be obliged to mention, that thirst may be excited in two ways, in the one case to make reparation for the loss the body sustains in the exercise

of its functions, and in the other, to impart a due degree of solubility to such aliment as may require it. The Materia Alimentaria embrace not only such substances, as afford aliment to animals, but also such articles, as essentially contribute to the promotion of nutrition. All the first variety of substances, belong either to the animal, or vegetable kingdoms, for it is only such bodies as have enjoyed life, that are capable of serving the purposes of nutrition in man, or other animals, all the latter kind are classed as Condiments. We shall divide aliments, into Solid, and Fluid, and under the head of solid aliment treat of Animal and Vegetable food, next consider condiments, and then under the head of Fluid Aliment, treat of Spirituous and Watery nourishment, and first of

Animal Food.

The elementary principles of animal substances may be said to consist of Carbon, Oxygen, Hydrogen, and Nitrogen, although portions of Phosphorous, Sulphur, Iron, Silica and other substances of a like nature may be detected in animal matter —

The Proximate animal principles, that we shall consider are Fibrin, Albumen, Gelatine, Adeps, and Osmazome — Fibrin enters largely into the composition of the blood, and forms the basis of the muscles, and is considered one of the most abundant animal principles, it is solid, white, inodorous, and insipid. Albumen, this principle appears under two forms, solid, and liquid, it forms an essential constituent of the blood, and is contained in several of the textures of the body, as the cellular membrane skin &c — The character which albumen possesses of being coagulated by heat distinguishes it from all other animal fluids. Gelatine is found abundantly existing in tendons, cartilages, membranes, bones and skin, it is easily dissolved in boiling water, forming a semitransparent jelly upon cooling. Adeps or animal fat is a principle found more or less abundantly deposited in the cellular tissue, some parts of which contain it constantly, other parts only occasionally and there are other parts in which it is never found. Fat is composed of two parts, the one fluid, and the other concrete, which are again composed of two principles called Elaïne and Stearine. Osmazome is the

sapid principle of meats, and it is to this that the characteristic odour and taste of Soup is owing, it has a yellowish brown colour, and is very soluble—

The digestibility of animal food, may be said to depend upon its chemical composition, and its mechanical state, with regard to texture, and consistance, if the food possess too great a degree of density, the process of digestion will be retarded, and such too, is the case when it is of an opposite state of consistance; this power which texture and coherence exert on the digestibility of aliment, is thus explained, the conversion of food into chyme is effected by the solvent power of the gastric juice aided by the "churning" it undergoes by the motions of the stomach, now where the food has too firm a texture, the attraction of cohesion can not be sufficiently overcome, by the organs of mastication to favour the action of the gastric juice, and on the other hand unless the substance possesses a texture of sufficient firmness, it will not yield to the motions of the stomach, such is the case with soups and other liquid aliments, and when these articles are introduced in to the sto-

-mach, nature immediately sets to work to alter this state of things, and they are either coagulated by the gastric juice or their watery parts are absorbed, and the nutritive matter being then placed in a proper condition, is chymified as usual. We find that age exerts a considerable influence over animal food, for in proportion to the age, flesh is generally coarser and more firm in texture the proportion of fibrin is much greater in such animals as have arrived at puberty, and that of gelatine, much less than in the flesh of young animals; hence the flesh of very young animals is less digestible than that of older ones, for this principle that abounds in it, (gelatine) although it may contain the elements of nourishment in the highest state of concentration, can not be digested without the greatest difficulty on account of its evading the grasping powers of the stomach, and in consequence of its tenacity opposing the absorption of its more fluid parts, and this circumstance leads us to draw a distinction between the nutritive, and digestible properties of aliment, for a substance may require great exertion, on the part of the digestive apparatus to digest it, and yet

when it is finally digested, it may afford a great deal of nutriment, as is the case with fatty and oily aliment. In order to present the aliment, destined to support them, in the most favourable condition to be acted upon by the stomach, mankind invented the art of Cookery, and by its means alimentary substances are mechanically and chemically changed, but the extent and nature of these modifications we can not stay to consider, but will only mention that Roasting, and Broiling are considered the most eligible modes, in which heat can be applied to animal aliment. We shall now proceed to the consideration of

Vegetable Food.

The vegetable elementary principles differ from the elementary principles of animal substances principally in not containing Nitrogen. Every distinct compound which exists ready formed in plants, is called a Proximate principles and to enter into a description of them would be an endless task, so that with regard to them we shall only mention that Gum, Fecula, Gluten, Sugar, Acids and Resin are the principle and most prevalent. That we may restrict ourselves

within proper limits, we will confine our remarks to Farinaceous aliment, in considering this division of our subject, and first of Bread. the flour of wheat contains a mucilagenous saccharine matter, starch, and Gluten, this last resembles the proximate principles of animals more than any other that we find in vegetables, and the superiority of wheat flour is owing to the quantity of this principle it contains. It is to its presence that wheat flour owes its property of forming a tenaceous paste with water, and to the same cause is owing the formation of light spongy head, the carbonic acid which is disengaged during the fermentation of dough being detained by this principle distends the whole mass and thus produces the rising of the dough. Bread is made of flour in different states, thus it is used for that purpose, when it is deprived of all its bran, and when only a part, and when none at all is seperated from it, and an important dietetic fact is connected with this circumstance, for bread that is made of that variety of flour which is deprived of all its bran, is apt to produce costiveness in consequence of the astringent tendancy of starch

but this is counteracted by the presence of the bran, which is said to exert a mechanical action on the intestines and thus to excite them to action. The importance of bread as an article of diet will be easily deduced from the nature of the function of digestion, for in addition to its nutritive qualities it serves to divide the food and to impart a suitable bulk and consistance to it; it is therefore more necessary to conjoin it with articles containing much aliment in a small space, than where the food is both bulky and nutritive - Potatoes, Rice, Peas, Sago, and the like belong to the class of Farinaceous aliment, they do not however in a paper of this kind, claim sufficient attention, to be treated of seperately, and all that we shall remark with regard to them is that Boiling is the best mode of cooking them, and vegetables generally — Whether nature originally intended that man should feed on animal or vegitable food, has afforded a fertile theme for discussion, but a survey of his organs of digestion declare at once, that man is omnivorous, and if greater proof is required, we have but to turn to the

various nations of the earth to discover that roots, fruits and flesh are capable of affording him nourishment either seperately or conjointly; and the same view will discover to us, that climate in some degree modifies the diet of Mankind, thus in hot climates it seems that man is instinctively led to the selection of vegetable food, as the Bramins and Brazilleans, whilst in the more northern regions of the Globe, the inhabitants use little beside animal food. Animal food seems particularly adapted to young children and growing youths since they require a portion of nutriment to be consumed in the development of the body, in addition to that which is required for ordinary subsistence and it appears that the aliment of almost every animal in the first stage of its life consists of animal matter; but it is badly adapted when exclusively used to persons of sedentary habits and to artisans and labourers of large towns— The necessity of dietetic regulations is not done away although man is omnivorous, on the contrary, a great variety of diseases might be removed by the observance of them, without the assistance of medicine, and

on all occasions they come in as proper assistants to the means of cure, which sometimes prove perfectly useless on account, of the neglect of them. Thus it will be seen that the dietetic part of medicine, is no inconsiderable branch of the science, and justly requires a much greater share of attention than it usually meets with; for surely nothing can be more important, or more intimately connected with our health, than our diet, and it certainly argues that we have paid too little attention to the subject to suppose, that nature has implanted in us, instincts sufficiently strong and intelligible, to direct us to what is salutary, and to warn us of what is injurious — Of Condiments, we have already defined them to be, those substances which are in themselves incapable of nourishing, but which in concert with our food, promote digestion, and the article that first claims our attention is Salt, this appears to be an indispensable stimulus to animated beings, as is exemplified by the avidity with which animals seek it and the difficulties they will encounter to obtain it. In Holland such was

the esteem in which this article was held, that one of the modes of punishment of that country, once consisted in feeding men on bread alone, unmixed with salt, and such as were condemned to this punishment, are said to have been devoured by worms engendered in their own stomachs, in consequence of the want of this article. Of Vinegar, this acid in small quantities is a grateful and wholesome stimulant, it will often check the chemical fermentation of certain articles, and prevent vegetable matter from inducing flatulance. Experience, not Theory, has established the beneficial operation of these condiments, and it perhaps will be difficult to offer a theory for its explanation, we shall only observe with regard to it, that as the gastric juice is supposed, to have its active principles imparted to it, by means of the muriatic, and acetic acids, these condiments we have just mentioned may be the sources from which the stomach may derive a supply; and to pursue the subject further as a predominance of the acetic acid is discovered in the gastric juice

of herbivorous animals, we should expect that vinegar would be most appropriate to vegetable food, which supposition I believe experiance justifies. There are other condiments, called Aromatic, but they are by no means so generally used, as the two we have mentioned, such as pepper, ginger, nutmeg, cloves, cinnamon, tyme, mustard, garlic, and the like, these articles may produce their beneficial effects, by means of their stimulant effects only, these we should be limited, for they evidently are capable of destroying the tone of the stomach, although it is generallay effected by insensible degrees. Oil and Butter constitute what are call'd the oleaginous condiments, but it is doubtful whether either produce any beneficial effects upon digestion, butter, at least in its melted form, is considered very injurious, on the contrary.

We come now to the consideration of Fluid Aliments and in this place we may consider the most suitable period for taking liquids. By drinking during a meal, we shall assist digestion, if the solid matter be of a nature to require it, and in

-pede it, if the quantity taken renders the mass too li-
-quid, but in general, the best test of the necessity of
liquids, is afforded by the sensations of the individual
unless his natural instinct has been eradicated by
the habits of artificial life - Spiritous aliments
include Wine, Malt liquors, Brandy, Alcohol, &c. Wine
is the fermented juice of the grape, the juice of this
fruit differs from all others in having all the prin
-ciples of vinification ready prepared to undergo a
regular and complete fermentation. The character-
-istic ingredient of all wines is alcohol, and the
same quantity of this article introduced into the
stomach under the form of wine, and in a state
of mixture with water, will produce very dif-
ferent effects upon the body, for whoever takes a bottle
of Madeira, will drink nearly half a pint of alcohol
or almost a pint of Brandy. There exists no evidence
that a temperate use of good wine is hurtful
to adults, but in youth and still more in infancy
the stimulus it imparts to the stomach is un-
-doubtedly hurtful, but for old age, wine has been truely

called its Milk - but it is essential to recollect that wine may be contaminated by the addition of alcohol, which in its free state, produces a numerous train of diseases, although taken under the apparent form of Wine - Malt liquors differ from wines in several essential points, they contain a much larger portion of nutritive matter, a less portion of alcohol, and in addition, a peculiar bitter and narcotic principle derived from the hops - These liquors are more nourishing, and less stimulant, than wine. In obedience to custom we have placed spirits, and alcohol in its pure state, among the Materia Alimentaria, but in our own opinion they should rank among the Materia Medica, where we shall leave them to be described - Watery Aliments consist of water, syrups, vegetable and animal infusions as tea, Coffee &c. Water is the natural beverage of man, but he has long since left the path of nature, and no longer considers "water as his best drink and salt his best sauce". The quality of water varies with the source from which it is obtained, thus the purest kind is

called it Pitch, but it is supposed it is probable that
there may be particularly in the collections of other
Hill, which is in the first volume of a manuscript
[illegible] of the garden of Hilliard [illegible] the [illegible]
[illegible] of Phoenix of Nature. Small figures of the [illegible]
in general [illegible] Pitch, they contain a [illegible]
[illegible] of [illegible] a [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
figures are more [illegible] and [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

rain water, then spring, river and well water approx-imate its purity in the order in which I have placed them; with the exception of Tea and Coffee we shall not make any remarks on the other articles of this class except to observe that when they are introduced into the stomach, their watery parts are taken off and the remain-der is converted into chyme. Tea, there are two varieties of tea Black and Green, they possess narcotic & astringent principles, and in common with other narcotics their primary effects are stimulant, producing exhilination and refreshment, Green tea produces by far the most power-ful influence on the nervous system, Black tea has less narcotic power and produces more tonic effects, than the other variety. Coffee, the principle upon which its qualities depend, is more stimulant, than that of tea and seems to exert a different species of action on the nervous system, it is antisopouific at least to many persons, and upon the whole is more wholesome than Tea.

The End

The End

An

Inaugural Dissertation

on

Stricture of the Oesophagus

Respectfully Submitted

to the

Medical Professors

of the

University of Maryland

by

Jeremiah F. Kuhn

of

Frederick Town

Maryland

1830

In approaching this subject, I am fully aware that I am entering on grounds but little frequented, and that it falls to the lot of but few individuals, even in the course of a long and extensive practice to meet with many cases of this interesting and fortunately for humanity rare affliction. To the older Surgeons it was scarcely known, nor could they afford the patient any reasonable prospect of relief when discovered, to the Moderns remained the honour and satisfaction of maturing remedies by which the disease is shorn of its most melancholy features. To those improvements of Surgery which have kept pace with the march of mind are we indebted for the present admirable mechanical treatment of the disease, in fact modern Surgery has opened to us a new and vast field, for the successful exercise of our art; many diseases that but a few years since were considered irremediable are now within the pale of its legitimate dealing: it is not within the recollection of every type in the science that the operation for taking up the Carotid Artery was considered almost necessarily fatal, and to be justified in the most extreme cases. — And now Surgeons approach the operation with as little fear, as they do that of extirpating the tonsils. All these facts go to prove that Surgery is not a stationary science, and may we not indulge the hope that Surgery will Hematodes a disease at present truly formidable, may with as much certainty as to

cured as Paronychia. But to return to the subject.—
Stricture of the Oesophagus is attended by difficulty of swallowing, and this arises from a permanent contraction of the canal; sometimes its diameter is diminished in size by fleshy excrescences or schirrous tumours, sometimes a schirrous thickening of its coats takes place throughout its entire length, and sometime it becomes contracted by ossification. Among these varieties the schirrous contraction of the coats of the Oesophagus is perhaps the most frequent, which in some instances is limited to one quarter of an inch in length, and in others extends through the greater part of the tube. This affection is generally gradual in its approach, and is attended by the following symptoms; though they are not all present in the same individual. There is a difficulty of deglutition, only a small quantity of food can be swallowed at a time, and this is required to be well masticated previous to an attempt being made to introduce it into the stomach; a thick mucus is discharged by an action between that of coughing and vomiting, eructations are present, and the patient is frequently enabled by his own feelings to point out with considerable accuracy the seat as well as the nature of the disease. It is difficult to trace the remote causes of this distressing malady, it generally commences without being sufficiently attended to and making an alarming progress before professional advice is sought for. Sometimes it has evidently been suspected

by a neglected catarrh, occasionally by small pox, Syphilis; and at other times by a highly nervous or Spasmodic diathesis. It is said to have been brought on by the smoke of tobacco, by the use of the Datura Stramonium, by the habit of drinking very largely of coffee or any other fluid, either immoderately hot or cold; a temporary contraction of the Oesophagus has also been produced by worms in the stomach and intestines, and in one or two instances apparently by worms lodged in the hepatic and common duct. Its cure is by no means of easy accomplishment, early in the disease some benefit has been derived from hemlock and ammoniated Copper given internally; and Dr. Murphy relates a case of great severity and long standing in which Mercury carried to the extent of producing Ptyalism proved perfectly successful. The patient was a female about forty years of age, and at the time of admission into Guy's hospital, was incapable of swallowing any thing but the thinnest liquids, and even these in very small quantities; she was greatly emaciated, her voice was hoarse, and her bowels were very considerably disturbed, she was salivated as soon as possible and continued under the influence of this process nearly six weeks; and as the time advanced all her symptoms gradually disappeared: and at the end of this period she left the hospital perfectly cured. This is a very remarkable case in which the influence of medicine over one of the most obstinate of diseases is clearly demonstrated.

A case equally remarkable shewing the value of hemlock is related by Dr. Osier. I will state the liberty of introducing it in this place. The patient was a young nobleman at Genova, the Oesophagus which seems to have assumed a shining character, had become dilated into two large bags; one on each side of the neck and appeared strikingly prominent; the food he took commonly remained in these sacs for an hour or two, and was then thrown up, but whether in any ~~way~~ degree digested we are not informed. After having tried the skill of almost every physician and surgeon in the city without success, the patient was at length recommended to swallow hemlock pills, and compress the protuberance by a bandage round his throat; as soon as the pills were rejected, which like the food they were sure to be in an hour or two, their place was to be supplied by others so as to have the hemlock constantly acting on the seat of the disease; the patient soon became relieved, and was gradually cured, the pouches disappeared, the aliment descended into the stomach and the Oesophagus recovered its former caliber. Where the disease depends upon spasmodic action, cold freezing water has been recommended as a beverage, and applied externally; it has been said to have diminished and even taken off the morbid effect. Emetics are also recommended, they act by relaxing and expanding the affected tube.

Where the passage has assumed a bony hardness we can only make use of palliatives, the catheter or if this is impracticable a silver canula may be passed through the stricture, so as to enable the surgeon to convey food to the stomach, and this is the only relief which under these circumstances, we can promise the unfortunate sufferer. Cases depending upon worms in the stomach and intestines producing irritation, must be treated by the use of Anthelmintics, when brought on by worms in the hepatic or common duct Emetics and cathartics are the proper remedies. In the great number of confirmed cases neither hemloc, nor Mercury, nor any other internal remedy will prove of service, and our chief dependence must be as in strictures of most other dilatable and highly sensible canals, upon the bougie, it should be introduced twice a day of as large volume as the patient can bear without much uneasiness and increased in its diameter as often as an increase can be borne. the bougies are made after the manner of the urethral bougies: but increased in length so as to adapt them to the Oesophagus. The French Surgeons are in the habit of using the gum elastic catheter, which they recommend to be strengthened with the Stilet; and moderately bent in the form of a urethral catheter: it is to be held like a pen and passed through the nostril with its concavity turned downwards, and Mr.

Samuel Cooper in his excellent work on surgery, in speaking of the same instrument says, when the Surgeon is sure that the instrument has been properly introduced, its outer end is to have a piece of thread attached to it; the extremities of which are to be wound round pins in the patients cap, I presume with a view of keeping it in its situation; and says, the Surgeon can now inject either liquid food or medicines into the stomach. I would recommend in lieu of this instrument the common stomach tube, such as is made use of for washing out the stomach in cases when poisonous substances have been introduced into that organ, an instrument ~~first introduced~~ first introduced to the notice of the profession, by our distinguished countryman Professor Physic. Thus I shall be enabled to assign a satisfactory reason for the preference here given; it unites the advantages of a bougie and Catheter, like the bougie it may be made of any size: so as to enable the surgeon to increase the diameter of the instrument as he may deem expedient, it possesses sufficient firmness to overcome some considerable resistence, fluids can be introduced with the greatest facility, and thus the nourishment of the patient is conveyed into the stomach; its length does not constitute the least of its advantages, reaching from the mouth to the stomach.

it can be brought to operate upon the disease in any part of the canal, and it does not require the precaution of an external fastening to prevent its superior portion from slipping from its proper place. The bougie is liable to this objection, it does not answer the purpose of conveying the patients food to the stomach when the case demands it; and the catheter can only be used when the stricture is high up in the canal, it may slip from its place in the nostril and occasion much trouble to the surgeon thereby, its diameter is not sufficiently large to afford relief; these are a few of the many considerations, which induce me to prefer the stomach tube, to all the other instruments. The operator may use a stilet with this instrument if he thinks proper; but I do not see any necessity for the practice; however, if such an addition be used, as convenient a substance as it can be manufactured of is the common whale bone, it possesses sufficient firmness united with a proper degree of elasticity, and is admirably calculated for the purpose. The patient is to be seated on a chair, with his head reclining

back, or he may be elevated in bed by means of pillows, or a frame made for the purpose; he is then directed to open his mouth, and slightly protrude his tongue. The Surgeon then takes the instrument, having previously lubricated it with sweet oil, in his right hand and follows the course of the tongue, pushing it on slowly; when the inferior end of the instrument arrives near the root of the tongue; you direct the patient to imitate the action of swallowing: pushing it at the same time, and it will almost invariably pass over the epiglottis into the Oesophagus. If however it should be impeded by any obstacle, you immediately retract it, and then make another attempt at its introduction in the same manner as at first, it may accidentally enter the larynx: this is known by pain, violent coughing, efforts to vomit, and the stoppage of the instrument, in such an event, the necessity of withdrawing it would immediately suggest itself. After you have passed the tube beyond the stricture, you are to let it remain there as long as the patient can bear it, which with most persons upon its first introduction, will be but a short time: upon repetition the parts become more accustomed to its use, and it can be retained a longer time, it is to be used twice a day until the stricture be overcome.

There are some cases where simply passing the tube affords only temporary relief, where the stricture is dilated only at the time the instrument is within its margin, and immediately upon its withdrawal returns to its original condition; here it becomes necessary to make a permanent impression on the disease by retaining the instrument in the Oesophagus: under these circumstances I would advise its introduction through the nose, to prevent as much as possible any obstruction to the healthy action of the functions of the lungs: its introduction is to be accomplished much in the same manner as through the mouth, but we are not enabled to derive the same assistance from the patient. The tube moderately bent near its extremity is to be introduced through the nostrils with its concavity downward, and slowly pushed onwards, paying attention to any obstruction it may meet with. It may be here remarked that it is more likely to pass into the larynx when introduced through the nostrils, than when introduced through the mouth; this accident is to be carefully guarded against and the same precaution is necessary here, as in the first case, after having succeeded in the introduction of the instrument, it is to remain as directed by Mr. Cooper until the obstruction is completely overcome.

The nourishment of the patient is to be introduced

through the tube, and must necessarily consist of fluids, for this purpose animal broths are most proper, unless there should be symptoms present to forbid their use; medicines may be conveyed to the stomach by the same passage: to accomplish this, an elastic bottle is to be fitted to the upper end capable of containing a considerable quantity of liquid, instead of a bottle a pewter syringe may be adapted of equal capacity and used in the same manner. The bottle or syringe being filled with such matter as we wish to inject, and the tube already introduced into the stomach by the mouth or nostril, liquid food may be forced into the stomach to any length at option. In some rare cases the gum elastic tube or catheter cannot be used primarily, and the stricture requires the use of a firmer instrument to overcome the obstruction at first, and fit it for the reception of the tube or catheter: a case of this kind occurred to Boyer a French Surgeon, being unable to pass a gum elastic catheter through the stricture, he first passed a silver canula. The introduction of the former instrument through the nostrils was found to be quite impracticable, but as it was important to fix the outer end of the catheter in the nose, so that the instrument might be kept conveniently introduced, Boyer accomplished his wish by first conveying

one end of the ligature through the nostril to the fauces with a probe: whence it was drawn out of the mouth with a pair of forceps. The upper part of the catheter was then fastened to this end of the ligature and the instrument was pushed from the mouth down the Oesophagus, until its upper end remained alone visible at the back of the mouth. With the extremity of the ligature the upper portion of the catheter was then drawn from the fauces out of the nostril and fixed there, and thus was his object accomplished; this is one of the many cases when the ingenuity of the Surgeon is taxed to supply the proper remedies. When the Oesophagus is so completely closed as to prevent the introduction of a catheter, and consequently food cannot pass into the stomach, our only resource is in the administration of nutritive clysters, to preserve as long as possible the life of the patient. Their utility has of late years been satisfactorily proven in the attempt to prolong life for some length of time. The lacteals which decrease in number as the intestinal canal approaches its termination, cannot take up an adequate supply of nourishment, and the patient if not supported by other means, must soon die; to remedy this inconvenience in a measure, I would propose the employment of a flexible gum elastic tube, similar to the one made

use of as a stomach tube, to be passed into the rectum and through as great a portion of the intestinal canal as we can accomplish, and then inject the matter of a nutritive clyster through the tube, after the same manner as we inject aliment into the stomach: we would by this means bring the nutriment into contact with a portion of the alimentary canal containing a larger number of lacteals, and by increasing the quantity expose it to the action of a great extent of surface. I am however disposed to believe that such cases are utterly hopeless, unless we can succeed by the use of hemlock applied to the seat of the disease, as in the case related by Dr. Osler in overcoming the morbid effects. I will here take the liberty of introducing a case which fell under the notice of my friend Dr. H. Abbett and was treated with the stomach tube successfully.

Baltimore March 1st 1836

Dear Sir

Agreeably to your request, I hasten to communicate to you a case of Stricture of the Oesophagus, which occurred in my practice in Bucks County, Penna. in the summer of 1827. I was called to see the patient with an attack of Asthma, and had no intimation of his suffering from any obstruction of the Oesophagus, until after I had been some time in attendance, when having given some Antimonials with a view of lessening febrile action, he informed me as my

next visit, that the powders had made him deadly sick; and occasioned repeated efforts to vomit; which he told me was impracticable, from an almost complete obliteration of the canal leading from the mouth to the stomach: this affection he continued had existed nearly three years, when he first observed it, ~~&~~ the obstruction was slight, but had been gradually increasing, until the period at which I seen him, when the inconvenience experienced from it was very considerable, he said that he was obliged to be extremely careful at meal time to masticate his food well, and make frequent use of tea or other liquid substances, to assist him in conveying it into the stomach, that notwithstanding all his precaution, he was frequently obliged to leave the table, in consequence of the food lodging at the place of stricture, and in deavour to discharge it by the mouth, which he was generally enabled to accomplish in the course of a few minutes. I asked him if even he had taken medical advice upon the subject, he replied that he had not; that he considered the disease beyond the reach of medicine, that no remedy other than mechanical, could afford him the least prospect of relief, and suppose such a remedy beyond the resources of our art. I endeavoured to convince him of his mistake in this particular, which was no difficult matter, for he was one of the most intelligent men in that section

of country. He was very much pleased with my description of the stomach tube, and its mode of action, and requested me so soon as he should recover sufficiently to undergo the operation to use the instrument in his case. I complied without any hesitation and accordingly after his health had become completely established, I proceeded to put in practice the treatment agreed upon; I placed my patient in a chair with his head reclining back, directed him to open his mouth, and protrude his tongue slightly; then taking the stomach tube, lubricated with a little sweet oil, I pushed it towards the root of his tongue, when the extremity of the tube had reached this point, I directed him to imitate the action of swallowing, which he complied with, at the same time continuing to push the instrument towards the fauces, it passed into the Oesophagus without any difficulty; it was now continued onward without any obstruction: until it had reached the stricture which was low down, near the Cardiac orifice of the stomach, it now required some little force to pass the stricture, but this was eventually accomplished: the instrument could not be kept in long in the passage on account of the irritability of the stomach in the very first thereby. I continued to perform the operation daily, each succeeding time suffering the instrument to remain longer than before, in the

course of a week the obstruction was completely overcome, my patient was now enabled to swallow as he used ordinarily to do, previous to his being afflicted with this disease; and expressed himself in the warmest terms of the benefit which had been conferred on him. stated that he could now sit down at the table of a stranger or a public hotel when travelling without feeling the least alarm, that he should disturb the company, by being obliged suddenly to leave the table in consequence of his food being obstructed in its passage to the stomach, as had been the case whilst he was troubled with the disease.

Very Respectfully
Yours &c
Henry Ashbell

Dr. J. H. Huber

An Inaugural Dissertation, On Cholera Infantum.

Submitted to the Examination of the Board of Trustees and Medical Faculty of the University of Maryland.

For the Degree of Doctor of Medicine,

By

George L. Fauss, of Pennsylvania.

1821

Introduction.

No disease in the whole catalogue, to which the human family are subject, in the short period of their existence, seem to me more particularly to demand our attention and compassion, and the effusion of medical aid, than those to which infancy and childhood are incident. The exquisite sensibility of their organization, and particularly the mismanagement of those to whom the immediate care of them is entrusted, necessarily render them the subjects of much pain and misery. The mortality among children, especially in large cities, has been so great, that it has been estimated that not less than one half die, within the first four or five years of their existence. And it is from this cause alone that I am induced to offer this imperfect essay, the first production of a young and inexperienced mind. I do not think to add any thing to the long list of remedies already given to the profession, by men of long and extensive experience; but by a kind of precedent may induce others to undertake the task, who are better qualified to do justice to so important a subject than myself.

Inaugural Dissertation

History.

Cholera Infantum is most prevalent, and attended with symptoms of the greatest danger, during the summer and beginning of autumn. It prevails in most of the large cities and towns of the United States. It generally spreads and assumes a more dangerous character, in proportion as the heat of summer increases. Temperature has a very considerable influence over this disease; great vicissitudes of heat and cold, sudden and long continued rains after a very dry state of the atmosphere, from the operation of the exciting cause. Hence in some years why it proves so alarmingly fatal among children, and in other seasons it is of comparatively rare occurrence. It may affect any period of infantile life, and few children entirely escape some of its various forms. It is my intention to describe one form of this disease only, which consists in nausea, vomiting and purging. Children are susceptible to this disease at any age, but most frequently those from the second or third week after birth, to the third or fourth year, of are the subjects

of this disease. It is not unfrequently ushered in by the usual precursors of the common bilious remitting fevers of warm climates. It attacks and is continued with evident symptoms of dyspepsia, loss of appetite, languor, occasional fits of nausea & sometimes vomiting, without purging, but more frequently attended with the latter. Most frequently it comes on with violent purging and vomiting, which continue together, or alternate with each other. The matter evacuated is more or less mingled with bile, its appearance is green or yellow. Yet nevertheless the stools frequently vary in appearance, being sometimes slimy, clayey, watery and bloody. In many instances the stools are large and fetid, but in others they are without smell, and consist pretty much as the food taken into the stomach. (constituting Lientery.) When the disease has been violent, and run a considerable course, tenesmus will sometimes occur, prolapsus ani has been noticed by some writers, but I am inclined to think this is a rare occurrence, when it does appear, perhaps it is owing to a relaxed state of the levator & sphincter ani muscles, and

will disappear as the patient acquires strength. Worms are frequently discharged during the disease, in some stage or other. The symptoms which I have enumerated are accompanied with a fever which is marked with evident exacerbations, especially in the evening, and like many other bilious diseases of the season, is marked with morning remissions. The pulse in onset of the disease is quick and tense, full and hard, but in the advanced stage, from the frequent evacuations, it loses its force, it becomes weak frequent and quick. Great thirst generally accompanies the whole course of the disease, the skin is hot and dry sometimes a moisture breaks out about the face during the nausea and vomiting, the abdomen swells and is very hot, the extremities are much colder than natural. A severe pain or griping in the bowels, is one of the most frequent and distressing symptoms of this formidable malady, it is generally known by the child starting, by frequent fits of crying and the forcible contractions of the arms and feet toward the stomach. the head is frequently so much affected, that we have evident symptoms of delirium. The disease has no limited duration, depending generally on the manner of its attack,

the habit of the patient, and changes of the atmosphere. A hot dry, or moist atmosphere seldom fail to increase the violence of the disease, whilst a cool dry atmosphere will diminish the violence. It continues in some instances for five or six week, and in some even several months, and then the symptoms become more numerous and distressing, the body becoming so emaciated in some instances, that the bones protrude through the skin, a constant tenesmus takes place, though but little matter can be voided, the eye becomes languid, and sinks deep into its orbit, the features are contracted, livid spots appear, a sore mouth, hiccup, and strongly marked hippocratic countenance, generally precede the fatal termination of the disease.

Diagnosis.

The diseases with which Cholera Infantum are most likely to be confounded are hydrocephalus internus, dysentery, and affections arising from worms in the alimentary canal. The line of distinction between it and hydrocephalus are, that in the latter the pulse generally continues more full tense and frequent; the evacuations are not so copious nor accompanied with any discharge of bile.

It is more commonly preceded by an obstinate pain in the head, the pupils of the eye are much dilated, strabismus, greatly disturbed by noise, which are generally preceded by costiveness. It is distinguished from dysentery by the latter being attended with more pungent pain and griping, and from its more rare occurrence among children. Cholera Infantum has been blended with affections arising from worms in the intestinal canal, some Physicians have thought it sufficiently distinguished from worms not having been passed in the first attack of the disease, but it has been observed that worms are sometimes voided in the different stages of the disease, which I conceive dependent upon the violence of the diarrhea suddenly repelling them, In cholera the operations are very different nor is it preceded by, or accompanied with, that picking or rubbing of the nose, and most of the characteristic symptoms of worms will be found wanting.

Prognosis.

In most diseases it appears to be a difficult task to lay down decided and unequivocal prognostic symptoms. Under this impression I feel a diffidence in attempting to say much

upon this head, but it is rational to suppose that when the disease attacks a very delicate frame in warm weather, when the vomiting is excessive, the stomach and intestines extremely irritable, so as to retain nothing taken into them, with a weak and frequent pulse, cold extremities and clammy sweat, we may safely inform the attendants of such, that life is suspended by a thread, and that the probability is, that the case will terminate fatally, but when the symptoms are the reverse, we may encourage them to have confidence, for it is probable that the patient will do well.

Predisposing Causes.

Predisposition is the that state of the system which renders it susceptible to the operation of the exciting cause. The cause which invites morbid or excessive action, more particularly to the stomach and bowels, is debility of the parts, which is succeeded by an increased excitability, or a greater aptitude to be acted upon by stimuli, and may arise, First, from hereditary predisposition, by weak organization, Second, a particular irritable state of the stomach or bowels, arising either from preternatural conformation, or diseased state of the body. Third, irregularity in diet

Exciting Causes.

Since the predisposing cause is debility, and is always attended with an accumulation of excitability, the exciting causes must be stimulants, and are such as induce fever, which is to be considered as the primary affection, for the causes which act generally on the system, I shall refer to authors. Those which act directly on the stomach and bowels are, An increased secretion of bile, aliments offensive from quantity or quality, sudden suppression of perspiration, repulsion of cutaneous eruptions, the use of drastic purgatives, the long continued use of magnesia and rhubarb, by irritating the stomach and intestines, may induce diarrhoea & cholera.

Proximate Cause.

In establishing a proximate cause to this disease as in many others, there has been great diversity of opinion, some suppose it to consist in spasm arising from debility of the parts. Dr. Brown classes it among the asthenic diseases — Dr. Cullen imputed it to an increased peristaltic motion of the intestines, arising from the action of stimulants. I shall now without regard to any of those opinions, give the theory I mean to adopt, it is that of fever in general

unduly determined to the liver and intestinal canal, producing congestion of the whole portal circle, stomach & intestines. This too, if I am not in error, is the opinion so ably taught by the learned Prof. of Practice, Dr. Potter.

Treatment.

Most physicians, and particularly those of the United States have agreed that the first and most important step towards the cure (when circumstances will permit) is, to remove the patient from the city to some healthy part of the surrounding country, where medical aid is scarcely necessary. On the utility of this practice I beg leave to refer to Rushes medical enquiries. Now we come to consider the immediate articles of the Materia Medica, and among these calomel seems to stand preeminent, for upon the use of this article alone, depends the only successful practice ever adopted in this disease, it is the sheet anchor if properly administered. To a child two years of age, it should never be given in doses exceeding half a grain three times a day, to children under this, one fourth is sufficient three times a day. In such doses calomel removes the congestion of the whole portal circle, but in larger doses it is apt to produce great debility, and therefore should never

be used in larger doses. When the rectum becomes excoriated from the acrid nature of the dejections, injections of warm water are very soothing, and is perhaps the best article we can employ, a variety of drinks have been recommended such as aromatics, strong coffee, without sweetening, and in tea spoonful doses. The mothers milk, or a substitute for it, viz, cows milk, sugar water, &c. are no doubt the best. Regimen, Milk, sugar & water, boiled milk & boiled crackers are very good. Breast milk of all others is the best food for the child: after the violence has been subdued by the proper use of calomel, tonics become highly useful to remove the debility, for which purpose oak bark is one of the best, peruvian bark answers a good purpose, red oak bark boiled in milk and sweetened with sugar, to be given as often as food is required, is an excellent remedy in this disease. Tincture Kino 5 to 10 drops, three or four times a day, is also a valuable remedy, when there is much acidity in the prima viae calcined magnesia will be found extremely beneficial in doses of a teaspoonful, Blisters have been much used, but they very deservingly are now going into disuse. Fractions over the abdomen with Laudanum is of some use to allay

pain, but must never be used when the secretions are vitiated. In cases of complication of this disease, with Pertussis, the tinct. of Lobelia, should be employed, for it is very certain of affording relief. I shall conclude this Inaugural Essay, by mentioning the best means of preventing the occurrence of the disease.

1st By avoiding the causes which induce debility, and all such as stimulate the system. 2nd Regularity in the diet and drink, with a faithful attendance in guarding against the changes of weather, by accommodating the dress of children to them.

3rd To avoid costiveness by the use of gentle laxatives, and to attend to cleanliness, both respecting the skin and apparel.

4th The daily use of the warm bath.

5th The removal of children to the country, before the approach of warm weather, this advice is peculiarly necessary during the whole period of dentition. Finis.

An
Inaugural Essay
on
Cynanche Trachealis
presented to the Faculty of Physic
in the University of Maryland
for
the degree of Doctor of Medicine
by
William Garnett
of
Virginia
1828

Cynanche Trachealis

In conformity to the rules of this Institution rather than with the hope of offering any thing new; I have written this Inaugural Treatise. The subject of this dissertation (Croup) is one which has engaged the attention of the profession as much or perhaps more than any one point in medical Practice. Nor is the interest it excites at all surprising. The natural horror felt at the idea of suffocation, and the pain experienced in witnessing its effects; — the generally interesting age of the sufferer, and the compassion which this circumstance alone begets; — the uncertainty which prevails as to the management of the case; — the inability of the practitioner to arrest the progress of the disease; when once it has been fairly

formed; — its sudden access; — the rapidity of its march and its too frequently fatal termination; — all these have conspired to render croup an object of peculiar attention, and to induce practitioners to give to the World the result of their observations. Every affection of the Windpipe occurring in the Child, producing difficult respiration, with a peculiar ringing sound, and accompanied by a short, frequent, and dry cough has been included under the one generic name of Croup, and perhaps justly so as the phenomena are so truly characteristic of the disease, that they leave little doubt on the mind of the practitioner as to the general nature of the Case. But it is evident notwithstanding that these affections will admit of considerable variety, both as to the supposed originally

exciting cause of the disease its intensity, and the rapidity or slowness of the process of inflammation; — the prevalence of any one particular symptom, — the supposed seat of the disease, — and the nature of the morbid action going forward in the part.

Accordingly the divisional arrangements of Croup have been extremely arbitrary, and we hear of idiopathic and symptomatic Croup, — of acute and chronic, — spasmodic, — laryngeal, — tracheal and membranous Croup as frequently and as familiarly as if any very decided practical utility could be derived from such supposed varieties. But perhaps all divisions of disease not founded on pathological distinctions, or not involving some material point of practice are at best useless; and may be injurious to the student in producing that worst species

of ignorance — the mistaking the knowledge of the names of things for that of their nature. Laying aside therefore; all distinctions of an arbitrary nature we shall proceed to consider Croup under the forms most commonly developed by dissection the only grounds on which the existence of variety in disease can be satisfactorily established

. . . . . Croup may be considered as essentially consisting of three Species. 1st, in which dissection after death can discover no morbid change of structure, nor the results of any increased action. The larynx and trachea appear pale and smoothed and polished, without any indication of vascularity or thickening of the mucous membrane and the occurrence of death can only be explained by supposing the existence of some irregular action, such as spasm This form of Croup is by no means infrequent, is often fatal, its attack is sudden and it carries off its victim with a rapidity that almost

precludes the possibility of surgical interference
The second constitutes the inflammatory form of Croup, and exhibits all the appearances and all the stages of acute inflammation of the bronchial membrane in the Child. This is the form of dis-ease which produces the adventitious layer of coagulating lymph, is by far the most frequent of occurrence and when acute in its symptoms very generally has both a very rapid and fatal termination.
The third species is very rare, It is where the lining membrane of the larynx has become altered and thickened in structure, so as altogether to spoil the natural appearance of the organ, and of course to interfere with its functions. The commencement of this dis-ease, is extremely insidious, its progress slow but its termination inevitably distructive.
It is comparatively common in the adult when

it constitutes one of the examples of chronic laryngeal. In this division I have adopted the arrangement of Mr Porter a late writer on Croup. An arrangement which appears to me most natural and calculated to reconcile the discrepancy of opinion prevailing wether Croup may be considered as dependant on an inflammatory diathesis or debilitated condition of the body. The second species of this disease being by far the most frequent of occurrence, it is to this division that I shall confine my-self in the present essay.

The exciting causes of Croup seems in some instances, to be involved in obscurity, the disease making its appearance suddenly and without any previous warning. In some situations it is evidently more prevalent than in others, being rarely met with in high, dry, Mountainous

districts, whilst in low moist & foggy places its visitations are both frequent & severe. It is however, by no means necessary that such a condition of the Atmosphere should exist, in order to the production of Croup, for it is occasionally met with during the warmest and finest seasons. There seems also something like a predisposition to the disease, in particular families, many individuals of which shall be successively attacked with it, whilst other children placed exactly under the same circumstances, with respect to local influences, diet clothing and general management shall escape completely. Individuals also appear occasionally to possess a similar disposition, for we see one child in a family, suffer five or six times from Croupy affections, and not one of the others ever exhibit a single symptom,

There are still others in which this disposition ex-
-ists so strongly, that any slight exposure to
cold produces croupy breathing & cough; but
in general these attacks are not very dangerous,
as each successive affection, seems milder and
more manageable, than the preceding. As Croup
is generally an affection purely of an inflam-
-matory nature, any cause capable of exciting
this disease action will be sufficient to pro-
-duce it, Thus indifferent clothing unwholesome
food, and want of general care may be con-
-sidered as its remote or predisposing causes, whilst
its immediate will be found in occasional ex-
-posure, injudicious change of dress, mechan-
-ical injury or irritation or any other of those
circumstances found to produce inflammation
in other structures. It is very questionable whether
the usual privations attendant on a state of

poverty exercises any very decided influence in the production of Croup. Allowing for the difference of numbers in the different ranks of society, it would appear to be much more prevalent among the rich than the poor; a circumstance that can be accounted for, partly by the degree of hardihood acquired by these little beings who run about nearly naked all the year round, and partly by the nature of their food, being less likely to produce visceral derangement. Nothing seems more certain than that the habit of pampering children with improper food, or feeding them too highly as to quantity, very frequently predisposes to Croup; and hence perhaps the foundation of the remark, that it most commonly seizes on the finest and most robust children.

There are other causes which seem directly ~~or~~ immediately to be exciting causes of croup. These are first the spreading of inflammation from one part of the mucous surface to another, thus the disease may commence with common sore throat, without cough or difficult respiration, and run along the membrane until reaching the larynx it produces within it a kind of inflammatory action, which ends in the formation of the adventitious lymph. 2nd the spreading of ulceration, Thus occasionally the broad flat irregular ulcer, occurring in the throat, enlarging until it arrives at the glottis, and becomes the exciting cause of genuine croup. 3rd The application of a direct irritation, as in the instance of taking a draught of boiling water. 4th Eruptions which are repelled

or which suddenly seized, very often occa-
-sion croup, and some of the worst and
most intractable cases to be met with are
of this description. It is by no means un-
-common to meet with croup, producing
the adventitious membrane, and rapidly
destroying life, as the sequelae of the
sudden recession of Measles; it has like-
-wise been known to follow the rapid dis-
-appearance of common Itch.

Considering Croup as a purely
inflammatory disease, it would be only
reasonable to expect that its attacks should
be preceded and ushered in, by those pre-
-monitory symptoms generally attendant
on internal inflammations, but in this
respect it presents very great varieties,
sometimes the chief may have been observed

during two or three days, to have been languid, restless, and uneasy, its skin hot and dry, its tongue foul, and that it refuses its usual food. Young children are apt to become peevish and fretful, and refuse to leave the nurses arms for a moment. If the patient be more advanced in age the symptoms are often more clearly developed, shivering, head ache, nausea & other characteristics of fever are easily to be observed. However if these symptoms are not very severe the child will be disposed to struggle against them, particularly if it is afraid of being obliged to take medicine, or being restrained in its usual gratifications, so that frequently its mother or nurse will not have perceived its illness until croup appears, all at once in a form so for-

midable as not to be mistaken, occasion-
-ally however, the disease makes its attack with-
-out any previous warning whatever, and
the attendants are alarmed at night by
the cough and croupy breathing of a child
that had retired to rest in perfect health.
The early symptoms are, an extreme restlessness
with difficulty of respiration, accompanied by
a dry short and incessant cough, the char-
-acter of this cough is very peculiar, it oc-
-curs every minute and perhaps oftener, but
it is a single solitary cough, without any
thing like a paroxysm and without ex-
-pectoration, The patient may easily be ob-
-served to be suffering from some irrita-
-tion in the throat which would be relieved
if he could but expectorate, The sound
of the breathing is very characteristic, It is

shrill harsh and sonorous, and has been described as resembling the passage of air through a brazen tube. The restlessness increases and in the countenances of very young children something like an expression of anxiety and agitation may be traced. When the patient is more advanced, this expression is very evident, and he will in general submit to any proposal for his relief. A sweat soon breaks out over the upper part of his body which hangs cold and clammy on his forehead the eyes appear prominent and the cheeks slightly swollen.

If not relieved in the earliest stage the character of the disease and the appearance of the patient soon alter the respirations are more slow, long and laboured, drawn with almost convulsive energy, and with

every muscle that can assist brought into action; the expirations are comparatively easier. Like every other form of Laryngeal inflammation, Spasmodic exacerbations frequently occur in Croup; the patient then must either be raised up, or he flings himself on his face, and works and struggles as if convulsed; and if the spasm of the Glottis be severe or long continued, the blood may cease to be arterialized in suffecient quantity to maintain the functions of the brain, & the patient dies in a convulsion resembling that which might be occasioned by malformation of the heart, or other derangement which might interfere with the arterialization of the blood —

The sound of the breathing becomes stridulous or whistling, conveying the idea of air forcing its passage through a contracted aperture, The cough is still harsh and incessant, but sometimes the patient in his efforts to expectorate brings up some few flakes of separated lymph mixed or rather streaked with blood or with a tenacious bloody mucous.

The voice is entirely impaired the little patient being scarcely able to articulate, so as to be understood. The countenance is now pale, puffed and swollen, with a cold damp upon the forehead; the lips purple and yet pallid, the eyes glassy white and apparently protruded, the nostrils dilated the veins of the neck now distended

than usual: the Larynx moves upwards and downwards in the neck from the violent ~~from the violent~~ efforts to breathe; the chest seems to heave convulsively, and every symptom indicates the extreme anxiety of the patient to inflate his lungs. —

Towards the latter end of the disease the efforts of the Child to carry on respiration become gradually more feeble and languid its countenance is pale. its eye sunken and its lips pale and bloodless. It ceases now to toss itself about, and although respiration is carried on with considerable apparent muscular exertion, and with the same shrill sound, yet the vital energies seem to be considerably impaired. Convulsions if they have not previously appeared, are

seldom wanting in this stage and may continue by intervals to the last moment of existence. During the last few hours the patient is usually comatose — it lies stupid and insensible — incapable of being roused — breathing with extreme difficulty and only by respiration going on there is any sign of life,

It is not always that croup exhibits those characters already described, neither is it by any means necessarily fatal. It sometimes happens that the inflammation may be cut short and the progress of the disease arrested before it has produced the effusion of coagulating lymph; and even after this occurrence has taken place, it is possible that the membrane may be sep-

erated and expelled by coughing and thus a recovery be effected.*

It will in general be found that cases of recovery in Croup, have been frequent in proportion to the early adoption of remedial measures, because it is one thing to check inflammation and prevent its effects from taking place, and another to remove those effects, when they have been fairly formed, and because it is to the first of these objects that the treatment of Croup has been directed. But it appears to me not to be sufficient to diminish or increase action unless the constitution be kept until the period of danger is over, in a con-

* It may not be improper here to mention the treatment adopted by Mr McKenzie for the removal of this membrane. Smearing the Tonsils, arches of the palate and uvula with a strong solution of the nitrate of silver, by means of a Camel hair pencil; he speaks of as being the most successful mode of Practice —

dition that will render a removal of that action unlikely to occur: for however a patient may be brought down (suppose by blood letting) if he is not kept in this state a reaction will take place and a disposition produced in the system exceedingly favourable to the progress of inflammation. It is this which causes even large bleedings to be so frequently ineffacacious in the treatment of acute diseases and renders a repetition of them necessary before the affection is subdued, whereas one operation of the kind if followed by measures calculated to main-

- tain a state of nausea or debility will usually be sufficient. In many inflammatory affections, such as those of the head or of the gastric organs, the exhibition of medicines possessing those powers is flatly impossible; but in those of the throat and chest similar objections do not obtain, and I have used them with a fair proportion of success.

Bloodletting in Croup, should be always general, because the object is to produce direct & immediate debility, and the arm or jugular vein, may be indifferently chosen for the purpose. Topical bleeding by leeches &c may be resorted to in cases, where in consequence of the child being very fat, it may be difficult to discover

a vein but otherwise this practice is highly objectionable.—

It does not answer the purpose of immediately reducing the system; and it is questionable whether it can produce any effect on the vessels of a part which lies so far removed from the surface.—

Emetics are a class of Medicines that have obtained much celebrity in the treatment of Croup and probably with justice, for it is well known that an emetic will often cut short the progress of local inflammation altogether. But if it does not effect this purpose at once, the reaction subsequently produced is almost certain to prove injurious. Hence Dr Potter recommends them to be used only in the milder

forms of Croup.

Croup is always attended by spasmodic exacerbations; and these if not originally excited by intestinal irritation, are always considerably aggravated by it. For this reason alone purgative medicines would be most clearly indicated, and their administration should never be overlooked, but they are too slow in their operation to be solely depended on in a disease which runs its course so rapidly as often to destroy life within forty eight hours. The same objection will hold good with respect to Blisters, they are too dilatory in producing their effects and besides they cannot be resorted to at an early period without considerable risk of doing mis-

-chief. It is always hazardous to apply a blister in the immediate neighbourhood of inflammation, & particularly so if the constitution has not been previously brought down by bleeding and evacuants.

In the latter stages of croup when the lungs are congested and there is a tendency to effusion within them there can be no objection to try the application of Blisters to the Chest, but scarcely under any circumstances will they be found beneficial in laryngeal diseases, if applied near to the part affected.

The exhibition of Mercury has also had its advocates in the treatment of Croup. Dr Latter says if confined to one remedy in Croup he should prefer Calomel to all others. His sentiment from the Doctor en-

To
The Right Revd. James Kemp D.D. Provost
of
The University of Maryland
and
the Professors of the same University
this Dissertation
is respectfully submitted
for
the degree of Doctor of Physick
by
W. E. Walker
of
Maryland

1825

Pertussis.

This disease is singular differing from every other except Mumps in appearing at every season of the year. It is commonly Epidemic and manifestly contagious. It arises from a specific contagion received from the atmosphere, which by its peculiar action on the lungs produces there a contagious secretion which being vaporised is exhaled from the lungs, affecting those in the immediate vicinity with the same disease.

It does not like most other contagions, necessarily produce a fever; nor does it, like most others, occasion any eruption.

This disease has in common with ~~the~~ Catarrh and the Measles a determination to the lungs, and although not inflammatory in Children, except from the action of Cold, when it attacks adults it becomes Pneumonia, leaving the lungs predisposed to

Phthisis.

It commonly comes on with the ordinary symptoms of Catarrh from which it differs so little in some, that if this prevail at the same time, it can scarcely be distinguished, as there is no fever and sometimes no hooping. The Hooping begins generally when the cough does but sometimes not till two weeks thereafter.

The Cough in general distinguish-it from other diseases but is not always peculiar as it is resembled by that of Catarrh and Phthisis. It is a cough in which the expiratory motions, are made with more frequency, rapidity and violence, than usual and is attended by the circumstance that when many expiratory motions have been suddenly and forcibly made and thereby the air in great quantity thrown out from the lungs,

Gentlemen.

If persons only proved an unfit for ministering by deputy board of Edward Fine refused it that have to claim in his house, that if this person proved of the same kind, it does seem to be distinguishing enough, but there is no power can have given no authority. Edward Fine by his own power authority, such as the people have offer.

The Court in general distinguish it from other ministers but is not allowed to be a person as it is proven when by that of Edward Fine Gentlemen. It is a very in which the people are very material, are many with many very wrong, people and many wrong, there such as all other days by the [illegible] [illegible] many people are very material [illegible] have been [illegible] by [illegible] [illegible] [illegible] by the act in [illegible] [illegible] [illegible] [illegible]

a full inspiration is necessarily and suddenly produced; which by the air pushing in suddenly through the glottis gives a peculiar sound which is called a Hoop; hence the disease has its name. When this sonorous inspiration has taken place the cough is in general again renewed and continues till a quantity of mucus is thrown up from the lungs or the paroxysm is terminated by the stomach ejecting its contents: now the patient is in general relieved for sometime; but sometimes not till after several alternate fits of coughing and hooping.

When the disease in this manner has taken its proper form, it generally continues for a long time after; viz: from One month to three; commonly six weeks, in some instances five weeks. If it commences in Spring it continues

only three or four weeks; but when it commences in Autumn or in Winter it lasts till Spring.

The fits of coughing return at various. They take place frequently in the course of the day and still more frequently during the night; but sometimes patients cough very little during the day. The patient has commonly some warning of the approaching fit; and, to avoid that violent and painful concussion which the coughing gives to the general system, he clings fast to any thing that is near, or demands to be held by any person who may be at hand.

In most cases after a paroxysm the patient is exhausted and the respiration is quick; but in many this appears very little; and children are commonly so entirely relieved that they immediately return to their play, or amusements in which they

were engaged immediately before. If it happen that the fit of coughing end by the stomach ejecting its contents the patient is commonly immediately after seized with a strong craving and demand for food, which is taken in very greedily.

When the disease first comes on there is sometimes no expectoration, or of a thin mucus only; and whilst this continues to be the case, the paroxysms of coughing are more violent and continue longer; but generally the expectoration soon becomes considerable and a very thick mucus in great quantity is thrown up, and as this is more readily brought up so are the paroxysms of coughing of shorter duration.

The violent paroxysms of coughing frequently interrupt the free transmission of the blood through the lungs and thereby its return from the head, and in this way that turgescence and suffusion

of face which commonly attend the fits of coughing may be accounted for, as also those hemorrhagies which sometimes take place from the eyes nose and ears.

This disease often takes place without any fever attending it though it is frequently accompanied with it, sometimes from the first, but more frequently after the disease has continued for some time. When it does accompany the disease it is constantly in some degree present; but with evident exacerbations towards evening, continuing till next morning.

Another symptom very frequently attending, is a difficulty of breathing; and that not only immediately before and after paroxysms of coughing, but as constantly present, though in different degrees in different persons.

When the disease is produced by cold

fever is invariably present, respiration difficult and the skin hot and dry; the disease violent and its termination unpropitious.

The pulse is different in different cases; as when the disease has been excited by cold or when cold operates on the system during its existance, the pulse is frequent and hard. In the paroxysm it is hurried innumerable and scarcely to be felt. When the lungs are implicated there is scarcely any arterial action with tension or hardness in the interval.

When by the power of contagion this disease has once been produced, the paroxysms of coughing are frequently repeated without any evident exciting cause: but in many cases the contagion may be

considered as giving a predispo-
-sition only; and the frequency
of the fits depending in some de-
gree upon various exciting causes;
hence its mildness in some cases
and the reverse in others.

The causes that may be enu-
merated are, such as violent
exercise; a full meal; the
having taken food of difficult
digestion; irritation of the lungs
by dust, smoke or disagreeable
odours of a strong kind, and
especially any considerable
emotion of the mind.

Children are in great danger
from this disease; but it is not
more fatal under two years of
age, than at any other time, ex-
cept to a child taken from its
mother's breast, and put upon
a coarse diet; but they are in
great danger when hereditarily
predisposed to Phthisis and

to Asthma.

When the disease is fully formed, if the paroxysms be neither frequent nor violent, with moderate expectoration and the patient during the interval is easy, appetite good, sleeps well, and is without fever or dyspnoea, no danger is to be apprehended, and these circumstances becoming daily more favorable, the disease soon terminates.

If the expectoration be either very scanty or the reverse it is attended with disagreeable circumstances, especially if profuse expectoration be attended with dyspnoea; but the cases in which the paroxysms are terminated by vomiting and are immediately followed by a craving for food, are generally without danger.

A moderate haemorrhage from the lungs or from the nose often proves salutary; but large haemor-

rhages are very hurtful.

The disease attacking persons under a state of much debility, generally eventuates unhappily; also sometimes that arising from the violence of the fits of coughing, as from the degree in which some parts can be locally affected according to their condition, we have produced Hæmoptoe, Apoplexy sometimes, and it has even terminated in Epilepsy, and when the antiphlogistic regimen has not been pushed far enough in Hydrocephalus Internus.

This disease runs a certain course then stops as if the cause were exhausted or had lost its effects; for after it has continued a certain time it cannot be communicated; but we find it may be continued from habit: hence it is necessary to divide the treatment to suit two indi

-cations; viz: That which is necessary during its contagiousness, and that when it is continued from habit.

At the beginning of the disease and for sometime after, the remedies to be employed must be such as are calculated to obviate its violent effects and its fatal tendency; but when from habit the only remedies required are those which may interrupt its course and put a stop to it in as short a time as possible.

For answering the first indication. When the disease is contracted the first step taken, should be to remove the patient into a purer atmosphere. When it is excited by cold, or when it has been produced by its operation, in an exacerbated state; a tense pulse and other inflammatory symptoms being present, it is necessary to use the lancet and

frequently, to repeat it; as also in plethoric patients, when from the circumstances of the cough and paroxysms it appears that the blood is difficultly transmitted through the lungs.

Purging is of little service except to remove costiveness, or when marsh miasma has implicated the liver.

Blistering is serviceable by giving tone to the weakened vessels of the lungs. They should be applied as near to the debilitated part as possible, as their impression is then more decided.

Emetics. These are useful by producing a habit of spitting. They should be repeated two or three times a day or more frequently e re nata. Added to their evacuating effects they by their specific impression on the stomach

act favorably on the lungs and whole system. They diminish febrile action and terminate the paroxysm of coughing.

They are more particularly indicated in those cases where respiration is oppressed, and the patients do not vomit during the paroxysms of coughing; but are of little use when each paroxysm is terminated by the stomach ejecting its contents.

To answer the second indication. When the contagion has ceased to act and the disease is continued by the influence of habit different remedies are to be employed.

Epispastics should be used and frequently repeated; adhesive plaster should also be used and applied over the Thorax.

Antimonials. These are serviceable in nauseating doses, at any time during the disease.

The Tinc: Opii Camph: with the Vin: Ant: relieves the patients and frequently procures sleep for the night.

Ipecac: useful as an emetic, but has

no advantage over others of the same class.-

Antispasmodics. These are useful Castor, Musk, Ether small doses of Ol. Succini with a small quantity of Opium. Conium Maculatum in small doses.

As an expectorant Carb. Pot. may be used.

The Tonics used, are Tar water, all the Terebinthinate substances and Palepium

Calomel is employed by some practitioners in small doses; but, it should be proscribed as it increases irritation and may produce hemorrhage.

Vaccination has been lately introduced as a remedy. If its impression can be made on the nervous system, before the disease has commenced it will mitigate it; but when the disease has been produced and becomes (inflam) inflammatory it can be of no service.

Finis.-

Copy

The pulling on the great bastard

from

of the Important Diseases of the Bladder

Inscribed

to the Right Rev. Bishop Hemp Lincoln,

the Regents and Professors

of the

University of Maryland

by

Thos. J. Mitchell

1842

Essay

on

The pathology and surgical treatment

of some

of the Important Diseases of the Bladder

Submitted

To the Right Rev.d Bishop Kemp Provost

The Regents and Professors

of the

University of Maryland

by

Leonard Mackall Jr

District of Columbia

1826

It will be seen that the subject which I have selected for my essay is one of sufficiently common place. My apology for adopting it, is its extreme interest in a practical point of view — Constituting as it does one of the most frequent surgical affections to which we are called.—

Retention of urine is an affection common to all epochs of life from childhood to old age. It is to Petit a distinguished surgeon of the 18th Century that we are indebted for the first systematic view of the subject. It was Petit who first pointed out the numerous causes upon which it is dependant, and established the distinctions considered of so much importance, by the British writers, the credit of which they give to their Countrymen Mr. Hey. The distinction to which I allude is of practical

importance. It is the ~~distination~~ discrimination of the two leading conditions upon which it may depend, the one referable to the Kidneys in which their secretion is deficient or suspended the other in which the secretion goes on as usual, but is retained either from a powerless state of the bladder or a diseased condition of the urinary outlet in the canal itself or the adjacent organs —

Hence the distinction into Ischuria renalis, and Ischuria Vesicæ. — In a state of health the secretion of urine is always going on, but is retained in the bladder the viscus distends for its reception until by the stimulus of its quantity or quality the bladder is excited to contract, when the expulsion of of its contents takes place. The multiplicity of causes which may prevent its flow from the bladder, the serious and terrible consequences which arise from its prolonged retention, together with the variety of succour which the enlightened surgeon is capable of commanding for its relief, recommends the subject to particular attention. —

The bladder is a viscus made up of three membranes

the internal of a mucus texture, which is the common lining of the whole urinary apparatus. (genito urinal mucous membrane.) The middle coat is muscular united by cellular tissue to the third placed without and which is nothing more than a reflection of the peritoneum. It is situated in the hypogastric region beneath the intestines, above the prostrate gland vesiculæ seminalis and the several muscles which form the sacral wall of the abdomen; behind the os pubis, and before the rectum, in men and the vagina in females; its relations in these last particulars are important in a practical point of view. The peritoneum abandons ~~over~~ the rectum from two to a half to three inches above the sphincter, and is reflected over the bladder, covering only its funding, hence it results that the bladder and rectum have no intermediate serous membrane between them, a loose cellular substance being all that is interposed. The bladder on its pubal aspect more especially when distended, is also deprived of the peritoneal covering and lies in contact with the arch of the pubis. It is at these

two points that the surgeon introduces the trocar when the life of the patient is endangered, and when at the same time it is impossible to overcome the obstacles to the introduction by the catheter. Cases of retention from permanent disorganization or stricture constitutes the only exception to the propriety of puncturing at either the above points. It is here better to immitate the practice of Sir A. P. Cooper.

It is important also to bear in mind that the bladder when empty lies deep within the pelvis and that its relations change with its augmentation of volume. If distended beyond its natural powers of resistance it loses its contractility. Under such circumstances we can readily feel its distended walls on an introduction of the finger per anum or per vaginam, whilst its anterior and ~~superior~~ part becomes manifest ~~and~~ in a round circumscribed fluctuating tumour above the pubis. When the retention is complete we have irritation and pain which seldom fails after a short time to involve the general system. Symptomatic fever is lighted up and coeval with this tumult the torment and distress

of the patient becomes greatly aggravated His care worn and haggard countenance is lighted up by a peculiar agitation he labours under an inexpressible anxiety and is constantly tossing about in the hope that a change of position will bring some relief to his sufferings. the abdomen becomes tense and is tender to the touch, his pulse is small irregular and intermitting, the tongue and throat are dry and an intense thirst adds to his sufferings. the respiration becomes hourly more oppressed and difficult. the perspiration exhales an urinous odour, the abdomen is distended and there is a constant vomiting of yellow and glairy matter. At this juncture the condition of the patient is pregnant with danger and if relief be not quickly brought all will be lost. Sloughing of the bladder next takes place leading to a temporary calm the patient and his friends are flattered into a belief that the storm has passed, the patient falls into an apparent sleep, but his slumbers are interrupted with low delirious mutterings and insensible of further suffering

he lapses gradually into eternity.

On approaching a patient labouring under retention of urine a cool and deliberate consideration of the circumstances upon which the mischief is dependant is of primary importance. The judgement of the surgeon should be fairly settled in all matters of emergency the life of his patient depends on his decision and decisive he must be, or his practice will be at best fluctuating or what is of worse consequence inefficient.—

Mr. Bingham in his work on the urinary organs notices a case to which he was called in consultation the wild expression of the countenance was particularly marked. The surgeon in attendance had mistaken the condition of his patient from the circumstance of the retention not being complete. The anxiety and distress he attributed to a "nervous cause" and quietly looked on permitting him to die a victim to his ignorance.

The first cause to which I shall refer as productive of retention more or less complete is inflammation.

It for the most part occurs in full plethoric habits more especially those addicted to women and wine. In constitutions thus abused the bladder is for the most part irritable we have the evidence of this in the incontinence of urine to which they are subject a condition in fact dependant upon a subinflammatory state of the bladder. In such individuals ~~such~~ slight causes will aggravate the already existing mischief provoking a highly inflamed ~~matory~~ state of this viscus. It is particularly common to see inflammation induced from intemperance coeval with a gonorrhœal affection and this more especially when the gonorrhœa is badly managed in the injudicious use of stimulating diuretics. Whatever however may have been the cause or whatever the peculiar constitution of the patient retention dependant upon inflammation can seldom be mistaken. It for the most part occurs suddenly and is attended with the most urgent and pressing desire to make water, there is always too early in the affection an acute pain burning and tenderness

in the hypogastric region reaching towards the loins and extending along the perinæum to the glans penis The extension of the pain towards the glans penis is particularly manifest, when the neck of the bladder is affected, nor can the patient bear the least pressure over the hypogastrium we have fever manifested in the flushed anxious countenance hard and frequent pulse with white tongue and oppressive thirst not unfrequently the stomach is highly irritable. These last circumstances together with the previous symptoms give a clear expression of the nature of the affection we have to encounter and the surgeon must be blind indeed who could permit himself to be beguiled from so plain and open a path. The leading and predominant symptoms are inflammatory. guided then by the principles which should always govern us in the management of such mischief we unload the general vascular series we apply leeches and fomentations and administer refrigerating injections and cooling cathartics, the urine the presence of which is

a source of irritation we draw off as soon as possible and here I may remark that there is no point of ~~surgery~~ practical surgery more important than a knowledge of the introduction of the catheter. notwithstanding its apparent simplicity great dexterity is required in its management. a very able surgeon has remarked that if he were disposed to give an opinion of the future success of the young candidate for surgical celebrity, he would argue more from his dexterity in the introduction of the catheter than from any other circumstance besides. In the introduction of the catheter for retention dependent upon inflammation gentleness is highly necessary, as by roudness we would increase the already existing irritation and perhaps be thwarted in our object. The difficulty arises from spasm of the neck of the bladder and muscles which surround the bulb and membranous portions of the urethra, but if our patient be properly prepared and a proper instrument be selected a little perseverance will enable us to succeed a large gum catheter is preferable to a small one, or one of

silver, immersing the feet in warm water, fomentations to the perinæum or what is better a general warm bath, will greatly assist the surgeon in the attainment of his end.

After having subdued the inflammatory excitement a blister laid over the hypogastrium will powerfully contribute to break up the subacute mischief which remains. I am aware that great apprehensions have been expressed by some enlightened surgeons of the injurious effects of a blister under such circumstances. But I know no authority objecting to their use from any positive experience of injury from them, and for myself I should apprehend no unpleasant consequences if their application be properly timed. It should be borne in mind that violent inflammation of the bladder is prone like similar visceral affections to extend to the contiguous parts, the peritoneum becomes affected and if after copious depletion the disease not arrested fomentations with blisters to the abdomen are the only means to which we can resort with any probability of success. The reason why a blister under such circum-

stances does not produce any increase of irritation may probably arise from the disturbed condition of the bladder — the peculiar ~~irritation~~ sensitive relation which exists under ordinary circumstances may be so modified by disease that the usual expression are no longer manifested Mr Wilson of London advocates the use of blisters but he restricts their action to a period sufficiently long only to raise the cuticle, when the blister is removed he directs the surface to be well washed and counter irritation to be kept up by the application of stimulating agents, as savin, ointment of cummin seed or tartar emetic. It must be observed that — Mr Wilson does not inform us that he ever witnessed mischief from permitting the blister to remain with a view to its full effect. His practice has been uniformly cautious from an apprehension that an aggravation of the inflammation might probably arise. —

Attention to the use of the catheter is of special importance the frequency of introduction depending upon the demand in each case the urine should never be permitted

to accumulate, as it never fails to increase the pain and heighten the difficulties in the introduction of the instrument, after evacuating the urine the French Surgeons were a long time in the habit of ~~introducing~~ injecting mucilaginous decoctions warm water &c &c. Desault used them in the early part of his practice at the Hotel Dieu, but subsequently laid them aside as being at best but a very feeble auxilliary and often productive of disadvantage. The practice was adopted in Great Britain and amid the fluctuation of opinion respecting it, it does not appear to be entirely lost sight off at the present day, a writer of estimation so late as 1821 observes "From the experience which I have had of the effects of injections the benefit we might expect from them has not been realised so generally as at first seemed probable, I have seen them increase the irritation: but I have also seen them used in cases where they have not irritated, but rather lessened the pain by taking off the acrimony of the urine and on the whole been serviceable"

The next cause to which I shall refer as productive

of ~~pr~~ retention is Paralysis a variety of the disease which has been improperly referred to by some writers under the appellation of dropsy of the bladder. In retention from this cause the bladder is incapable of executing its functions from a feeble atonic or powerless condition of its muscular coat. It is a state of things exceedingly apt to deceive the patient as well as the surgeon who contents himself with superficial observation It has too often been mistaken for incontinence In this condition the patient complains ~~of~~ more of general uneasiness, than acute pain more a feeling of weight about the perineum and pubis which leads the patient to prefer a recumbent to an erect position.

Retention from peralysis when Idiopathic or confined to the bladder never ~~does~~ comes on suddenly it is uniformly insidious in its march, the patient accustomed to discharge his urine in a full stream discovers a gradual falling off of his powers, he finds himself no longer capable of thus discharging his urine the same distance

instead of forming a parabola or the arc of circle the urine falls almost perpendicularly from the ure=thra. The affection arrived at this ~~point~~ stage on attempting to urinate he is obliged to make long and continued efforts before the fluid will pass. The quan=tity discharged at each effort becomes gradually deminished until he is incapable of discharging any water at all. Complete retention is now established which after continuing for a longer or shorter time, the patient is agreeably surprised on finding his linen wet from a quan=tity of urine dribling from the penis. over this he has however no controul. a considerable quantity is some=times evacuated in this manner so that he believes the obstruction removed and the bladder emptied. but his gratification soon vanishes on finding that no permanent relief is afforded; the truth is the blad=der is still distended but being incapable of retain=ing any more a certain quantity passes off, from the muscles ~~expressive~~ which usually ~~contract~~ contract the retain

it having had their power of resistance overcome by the long and constant pressure which has been exercised upon them. It is on this juncture that an heedless surgeon mistakes the disease for an incontinence ~~of~~ and should he manage his patient in the manner proper for such affection instead of relieving him he will greatly aggravate the evil, nay, distroy his patient by provoking inflammation in parts which are already verging to that state and by bursting, ulceration, or mortification of the bladder the patient dies

The causes which produce Paralysis of the bladder are for the most part coeval with advanced life, so frequently indeed do we meet with this affection in old men, that some authors have regarded it as a grievance necessarily belonging to three score and ten. In old age the bladder as well as all other parts of the organization loose their susceptibility to ordinary impressions It is from this cause that the bladder ceasing to feel the stimulus of the urine is no longer excited to contract its fibres

become rigid and it requires a stronger stimulus to awaken its torpid energies

Altho' retention from paralysis is for the most part met with in old age, yet we sometimes meet with it in individuals who have hardly entered upon the summer of life. in such individuals it is uniformly brought about by intemperance and debauchery. It is true that from this cause we have a premature old age with its attendant infirmaties.

Among the causes which induce this form of retention Desault has enumerated the bad habit which some individuals get into of retaining too long their urine whether from mental abstraction, indolence or a feeling of modesty. From this bad practice the bladder becomes gradually so accustomed to the stimulus of the urine that the ordinary stimulus arising from a distention of its coats is scarcely felt and the patient is only apprised of the necessity of emptying it when the distention becomes excessive, the bladder now contracts

but as Desault correctly remarks the expulsion of urine is seldom complete from the powerless state of the bladder a portion of urine consequently remains constituting in fact an incipient retention. The bladder becomes at last so habituated to the presence of the urine that its stimulus is scarcely felt and the repeated distention to which it is consequently subjected gradually exhausts its tone and paralysis is the result. Desault also inveighs against the bad practice of some old men particularly bachelors who too careless or indolent to get up to make water piss in the pot as they lie in bed. and Bichat remarks that altho' "retention from this cause may not be explicable upon any known physiological principles. its truth is sufficiently established by clinical observation and the fact cannot be doubted. It should be recollected also that paralysis of the bladder occurs symptomatic of remote injury or disease. when it arises from this cause it for the most part comes on suddenly. It rarely occurs

symptomatic of injury of the brain but in all extensive affections of the spine affecting its medulla, we have insensibility of the bladder with paralysis more or less complete of the inferior extremities.

Retention from paralysis is easily distinguished the fullness above the pubis and the disappearance of this fulness on the evacuation of the urine by the Catheter, the introduction of which there exists no difficulty leaves no uncertainty respecting the nature of the malady.

The most important circumstance to be borne in mind in this form of paralysis is that when it does not depend upon the medulla Spinalis, the retention is seldom complete the patient continuing to make water but the proportion evacuated is small when compared with what remains in the bladder. This circumstance together with the tumour above the pubis and the little pain which the patient experiences has very frequently led to serious mistakes of its character. Sabatier mentions several cases of ~~patients~~ individuals afflicted with this disease for several months

who had no suspicion of any such affection and who had been treated for complaints widely different from the one they laboured under. Women have been so much deceived as to imagine themselves pregnant. It is especially with ascites that the disease has been confounded. Morgagni has recorded a case in point. Murray also mentions the case of a female whose abdomen was so greatly distended that preperations were made for the operation of paracentesis abdominis her case having been mistaken for dropsy Mr. Cline of Guys Hospital also refers to a similar case in which he was invited to operate but the history of the case inducing some suspicions, he introduced the catheter and drew off 30 pints of urine. Schmuncker the celebrated Prussian surgeon cites a similar example. Lowder in fact mentions a case in which the operation for tapping was actually performed the patient died a victim to the operation from inflammation induced by the infiltration of urine in the peritoneal sac. These facts are

important as they serve to illustrate the necessity of a close examination in all matters touching the welfare of our fellow creatures we should be especially careful how we draw hasty conclusions, and under all circumstances in which our judgement is at stake the whole ground should be fairly looked at least our inductions be erroneous

Retention from paralysis presents two indications, the first to evacuate the bladder, the second if possible to restore if possible to its original tone where the affection is referable to local or general debility and is not of long standing, rather referable to a sluggish state than to a complete paralysis, an improvement may be anticipated. The application of cold is perhaps one of the best means we can employ to rouse up its powers, towels wet with cold water should be applied to the pubis, perinæum and thighs or which is better the affusion of cold water at short intervals thro' out the day, Petit records an interesting

case illustrating the good effect of cold, the patient laboured under a sluggish state of the bladder, and for the purpose of preventing paralysis Petit directed that he should decend into his cellar whenever he felt the slightest call to make water and that at night he should place his feet on a cold stone. Jourdain also mentions the case of a man 60 years of age who was threatened with paralysis, but who was relieved by sitting on a cold marble slab whenever he felt a call to make water, and we all know that immersion of the feet in cold water or standing naked exposed to a cold current of air excites a sudden call to micturate In young men where the affection has been brought on by debauchery and excess, they must become continent before any hopes can be entertained of a cure The patient ~~should be~~ especially mind ful never to put off a call to make water so soon as he feels the disposition ~~the~~ should immediately be encouraged attention to this particular with the use of the cold ~~bath~~ and a blister of two to the sacrum for the purpose of

rousing up the sensorium of the bladder with attention to all circumstances calculated to renovate the general system will seldom fail in producing a complete cure. In the commencement it is necessary to evacuate the bladder by the Catheter one of flexible gum should be permitted to remain in the bladder with a cork in its extremity, when the sensation to make water is experienced the cork should be withdrawn the catheter should be continued until the organ recovers its powers as indicated by the ability of the patient to throw off the urine in a full stream Some surgeons prefer withdrawing the catheter after each evacuation, but Desault and the best Surgeons advocate the practice of leaving the Catheter, it enables the patient to evacuate his bladder promptly as soon as he feels the disposition, his surgeon is not always at hand and the patient either from fear or some slight uneasiness produced in his own attempts at the introduction of the instrument may not succeed, relief is not obtained and his cure is consequently protracted.

Prof. Richrand objects to permitting the catheter to remain

To

John Buckler M.D.

I know no one to whom I can with so much propriety dedicate this my Thesis as to your self, for independant of the relation of Preceptor in which you stood to me in the latter part of my studies, the frequent marks of personal friendship which you have shown towards me giving me pleasure in paying this small tribute of respect, evidencing the superior estimation in which I hold your talents Permit me Sir before I close to express the ardent I have that the Institute you are about to open for the diffusion of medical knowledge may far exceed your most ardent hopes By this testimony of regard however I am concious that I sacrifice your dislike to public attention to the indulgence of my own pride in subscribing myself with greatest sincerity Dear Sir Your sincere friend and affectionate Student

D Macknab

end

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